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MEDICAL MISSION TO GREECE AND ITALY

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DURING the spring of 1948, medical missions were sent out under the auspices of the Unitarian Service Committee to various university centers, one to Greece and Italy, one to Poland and Finland, one to Germany, and one to Colombia. The present report deals briefly with experiences of the Greek-Italian Mission, which operated under the chairmanship of Dr. Paul D. White. Like that of previous missions organized and sponsored by the Unitarian Service Committee, its purpose was to meet important medical groups at a university level in centers that had been separated by the war from sources of new information over a period of years. By means of direct contact with heads of departments and with leading practitioners, it was possible to accomplish this and, what seemed of equal importance, to re-establish professional relations that had been broken since 1938. The sponsorship of this particular mission was divided between the Unitarian Service Committee and American Aid to Greece (AMAG), the agency through which the United States is providing material aid and professional advice to that unhappy country.

To give a representative background to professional opinion, the group was comprised of men from five American Universities and one Canadian institution and represented departments of physiology, bacteriology, pharmacology, internal medicine, general surgery, neurologic surgery, oral surgery, anesthesiology and dental research. Official invitations had been received from the universities of Athens and Salonika in Greece and from the faculties of Rome, Florence, Bologna, Turin and Milan in Italy. The procedure in each center was the same — that is, immediate and direct contact with the medical faculty, a series of planned formal lectures with the aid of medical interpreters and, much more important, a series of informal meetings as well as ward rounds and visits to various hospital centers in the areas concerned. By such an approach it was possible to establish a friendly relation with key individuals and to see at close range the existing problems, not only those that affected the teaching of medicine and the care of the sick but also the political and social ones. A great deal of information was made available through embassy officials, governmental agencies and casual conversations with medical students and civilians who were encountered in the various cities.

The situation in Greece during the April and May of our visit was extremely critical, inasmuch as the Greek Government was attempting to wage an internal war successfully and at the same time to reconstruct a country ravaged and depleted by Italian and German occupation and subsequent guerilla activities. At the time of our arrival a certain amount of stability was being obtained through the help of AMAG, which provided both military aid and advice and the actual distribution of relief to refugees and to communities in dire need of reconstruction and reorganization. From the first it was apparent that military necessities were uppermost, with the result that the needs of education and medical care were forced into a position of secondary importance. Added to this was the evident and appalling overcrowding in the schools, both in Athens and in Salonika. Although this applied to all departments of the universities, it was especially true in the medical schools, where there were approximately 4000 registered students in Athens and 2000 in Salonika. This student load imposed almost impossible difficulties in the way of adequate instruction, which at best had to be largely didactic. Besides the difficulty of excessive numbers, instruction was hampered by two factors: the relatively small number of experienced senior men, and the almost complete dearth of properly trained younger faculty members. The latter was due in part to actual losses during the war and in part to the fact that during the war years no planned, thorough training program could be maintained to provide for a sufficient number of younger men, because of the immediate and pressing necessities of care for the sick and indigent. As a result of all these circumstances, in addition to the fact that there had been little or no access to sources of current medical progress, Greek medicine was just beginning to emerge from a static phase of some years' standing.

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Because of depletion of scientific supplies and lack of funds for replacement, university, hospital and laboratory shelves were empty, or at best held very meager and ill balanced equipment of all sorts. Many important drugs were lacking, facilities for nursing and dietary care existed at only basic levels, and the hospital beds were filled to overflowing because of the great influx of civilian and military casualties.

The Greek medical situation has been colored of necessity by various developments in the country's history and tradition. This applies not only to the present critical situation but also to previous political, social and economic factors dating back at least to the beginning of the present Greek nation with its changing course under kings, republics and dictators. Economically poor, politically unstable and rarely organized from the point of view of efficient government, Greece has not had the opportunity to put on a firm basis sound medical traditions such as have obtained in other continental centers — in Vienna for example, where a greater degree of stability over a longer period has made it possible to establish great academic customs and advantages. The universities of both Athens and Salonika are governmental bodies, financially largely dependent on governmental grants (at present absent or completely insufficient). Appointments to the staff are in a sense political posts. Paralleling the changes in the Government, in Athens particularly, changes in faculty personnel are frequent, valuable men at times being replaced by others less capable but politically affiliated. This practice, not of course limited to Greece or even to Europe, represents a definite hazard to academic effectiveness since it leads to uncertainty of tenure of office and hence to inability to plan constructive departmental budgets; nor is the state of mind produced by such insecurity conductive to forward thinking even were other circumstances ideal.

Instruction in the medical schools, as noted above, was largely didactic, owing to the size of the classes. The clinical professors in many institutions were able, experienced physicians and surgeons, whose training reflected the teachings of the French, German and Austrian schools. Unfortunately, by tradition as well as by necessity of actual events, interest in and profound knowledge of the best in modern physiology and in the fundamental sciences was distinctly limited, although here again certain individuals stood out as men of great experience and learning. For the most part, however, teaching of the fundamental sciences was far behind what is currently demanded by modern medical concepts, and this was reflected in the therapeutic approach to disease, treatment being based chiefly on tradition and empiric knowledge rather than on physiologic and pharmacologic advances of recent years. The newer aspects of anesthesia were unknown, and consequently present-day transthoracic surgery with all its implications was not possible. Newer drugs, such as penicillin and streptomycin, were available only in limited quantities. Furthermore, completely inadequate housing and feeding facilities rendered it impossible to care for the tremendous overload of infectious disease. Tuberculosis posed a menacing problem of great magnitude with no immediate hope of isolation of open cases or of proper therapy, although there were many physicians who were entirely capable of treating this disease under normal circumstances. To other difficulties there was added a certain amount of fatalistic apathy. This attitude, not limited to the medical profession, is the inevitable outcome of the Balkan wars and the two world wars that have harried Greece for many decades — to say nothing of the existing "civil war," which is essentially a struggle between the communistic elements, trained and supplied by outside sources, and the present rather inefficient Government. Uncertainty was in the air, particularly when the Mission arrived in Greece, although it was of extreme interest to note an ever-increasing spirit of optimism and hope subsequent to the improving military situation under American guidance and aid.

In contrast to the obvious difficulties and at times somewhat deplorable aspects of Greek medicine, certain achievements and certain bright spots stand out brilliantly. Gastric surgery in Athens was exceptionally well done. Subtotal gastrectomy was performed with a high degree of technical skill and low mortality, and experience in this particular operative procedure was great, inasmuch as the incidence of ulcer in the community, as reflected in the hospital population, was high. Echinococcal disease was extremely common, owing to the animal carriers that were completely uncontrolled by any sanitary measures, and as a result surgery of echinococcal cyst was also advanced and skillfully performed. Gynecology and obstetrics were at a high level of performance, at least in university centers, because of the outstanding work of the dean of the Athens Medical School. From the public-health point of view, the widespread and continuous campaign against malaria had borne fruit to the extent that active cases of malaria in Greece have been reduced to a few thousand instead of several million. DDT spraying by air over malarial areas has been most effective, and was the one activity that was not interfered with by guerilla groups. In spite of woefully inadequate supplies of streptomycin, treatment of tuberculous meningitis had been carried out with more or less immediate success in a small number of cases. Interest in newer methods of diagnosis and treatment was keen although frequently it was impossible for the local profession to act on information because of lack of facilities. During the entire stay of the Mission in Greece, a genuine

interest was maintained and a very friendly atmosphere existed in centers where it was entertained.

An unforgettable by-product of the Greek Mission was a visit to the ecclesiastic community on Mt. Athos, made possible by special permission from the Greek Government and from the ecclesiastic authorities. This community is completely isolated from the present-day world by its own, centuries-old traditions and practices. It is composed of some twenty monasteries situated on the tip of the Mt. Athos peninsula. The Mission had an opportunity to see several of these monasteries, an experience of extraordinary interest because of the rich tradition of church lore and custom that went back to the period of Byzantine influence. The costumes and treasures were fascinating. Many of the monks were examined at their own request. With rare exception, these men who live an almost medieval type of life were in good physical health. Infectious disease seemed to be nonexistent, except for mild forms of endemic dysentery. Because of their extreme seclusion, psychosomatic disorders were not uncommon, but degenerative disease appeared to be at a minimum. A large number of monks were well into the eighth and ninth decades. The psychologic difficulties were noted more often in the younger monks, many of whom were obviously insecure and rather frustrated.

The effects of guerilla warfare were everywhere evident. Athens and Salonika were crowded with refugees, and really adequate nutrition for the average person was a critical problem. Sufficient food was available only for those of means; there were still evidences of wealth among a few. In Salonika, particularly, the fruits of guerilla warfare were seen at close hand. Troops and gendarmerie filled the city, and the military hospital was overflowing with recent casualties, most of which were being taken care of fairly efficiently although at times measures had to be improvised, owing to the lack of equipment and supplies. Civilian casualties were also numerous and presented a depressing sight. Periodically, guerilla forces raided outlying villages that were totally undefended and killed or maimed old men, women and children indiscriminately for no other purpose than to create terror and force evacuation of farms and villages. Survivors of these raids were occupying hospital beds and were kindly treated although under very difficult circumstances. They were frequently found side by side with unwounded children who were being temporarily housed in the hospital because of lack of other facilities. In these unfortunates the effects of starvation were obvious and distressing.

One special aspect of medical education in Greece is worthy of comment — that is, the plight of the medical student. Mention has already been made of the gross overcrowding of the schools. Following central and often western European tradition, there is no screening of medical students prior to matriculation. This is one of the causes of the tremendous crowding, and as a result medical students are ill equipped for study and work. Housing conditions are poor and insufficient; textbooks and periodicals are noticeable by their absence. Student libraries exist but are totally inadequate to supply the student needs. Reading is almost entirely limited to textbooks, which are usually out of date, and consequently the difficulties imposed by restricted laboratory and hospital facilities and by the didactic method of teaching are enhanced by the impossibility of access to sources of modern medical information. A great number of the students are extremely poor, and living is almost at a subsistence level. Faculty interest in students is traditionally a distant one, although a few outstanding exceptions were encountered, where members of the faculty and their wives were trying to do everything within their power to make the lot of the student a happier one. Resident and research facilities such as are known in this country are nonexistent.

Finally, tribute should be paid to individual members of the AMAG group who were particularly interested in public health and education. Among numerous other activities, this group has been instrumental in the distribution of much-needed supplies and has gradually increased medical facilities although these are still far below optimal levels.

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In Italy the work of the Mission proceeded along lines similar to those followed in Greece but at a much more rapid rate. The universities at Rome, Turin, Milan, Bologna and Florence were visited in turn. In addition to a series of formal lectures before faculties and students, interesting personal contacts were made between individual members of the Mission and their corresponding faculty members in the various cities. The transition from Greece to Italy showed sharp contrast despite the fact that Italy is far from restored to a normal level of political or social activity. Here too laboratories often evidenced the lack of many essential supplies and diagnostic equipment; medicines were absent or difficult to obtain. In the universities visited, the level of faculty activity was less restricted, and modern methods were being utilized in many instances very effectively and intelligently. Research was being carried on in individual units although under the ever-present limitations imposed by insufficient personnel and equipment. Scientific curiosity was keen in many quarters. Experienced clinical skill and awareness of the recent advances in medicine and surgery were obvious in the departments that were visited. The Forlanini Institute of Rome, for example, was a magnificent structure for the care of tuberculosis. It was thoroughly up-to-date and well equipped with ample provision for animal work and for modern therapeutic measures incident to the treatment of tuberculous

disease. It possessed an anatomic museum that was amazing in its completeness and in the arrangement of its specimens. Similarly, the Museum of Medical History in the University of Rome was extraordinarily well planned and filled with invaluable medical incunabula and exhibits. Original research on malaria was outstanding. Recent and quite modern buildings were to be seen in many of the medical centers, and in some, equipment of the finest quality and most recent pattern was available. It was evident that high medical standards were more universal and more widespread in Italy than in Greece, probably because of the greater age and number of Italian universities with their cherished traditions of many centuries.

As in Greece, however, there were gaps in medical knowledge, medical equipment and medical procedures. The student overload was just as apparent; in Rome, for example, there were said to be nearly 6000 medical students in the University. With few exceptions similar overcrowding appeared to be the case throughout all the medical schools in Italy. In spite of many individual brilliant clinicians and professors, the teaching load was so great that it was impossible to provide adequate instruction except at a lecture level. Bedside teaching was being carried out but by comparison with American standards was poor as far as quality and quantity were concerned. Laboratory investigations were limited by the variation in equipment and supplies to be found in the different laboratories. As in Greece, it was evident that interest in the fundamental sciences, as far as instruction of medical students goes, left much to be desired. Training in biochemistry lagged far behind, and a real understanding of and interest in physiologic processes was frequently superficial rather than basic and profound. Modern concepts of the treatment of nutritional disturbances, particularly in relation to preoperative and postoperative care, were little understood and would have been difficult to carry out because of actual food shortages. Ancillary services such as social service and occupational therapy were rudimentary; accurate follow-up study of therapeutic measures was difficult and with few exceptions unobtainable.

In Italy, however, possibly because of a more stabilized political and social situation, medical progress was being made, and a good deal of optimism was evident. Political uncertainties were still apparent, and the threat of great events that might again disturb forward progress in scientific and other realms was apprehended in all conversations. Even more than in Greece, interest and enthusiasm for American methods were evident; this was due at least in part to the fact that many of the ablest Italian physicians and surgeons were personally acquainted with the American trend of thought. In fact, throughout the European phase of the Mission, innumerable friendly contacts that had been interrupted by the war were re-established. As in Greece, the inequalities existing between the inner few and the remainder of the population were noticeable. A desire for American aid was frequently balanced by a lack of desire to depart from the *status quo* of those who were socially and economically in the more fortunate groups. This applied particularly to nonprofessional people encountered outside the medical centers. Almost everywhere an urgent wish was apparent, however, for American aid and co-operation. Again it should be mentioned, as in Greece, that vigorous antimalaria measures have resulted in almost complete eradication of this disease in the peninsula, at least as compared to its previous prevalence. Preventive medicine and public-health measures as well as nutritional problems were talked about frankly but as yet are but inadequately met, particularly in the southern part of the country. Reconstruction is going on apace, and hope for steady forward progress was everywhere evident.

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In short, the experience of the Mission to Greece and Italy was similar to that of the missions to Czechoslovakia and Austria of 1946 and 1947, in that it was possible to achieve a satisfactory approach to the leaders of the medical profession in a friendly scientific spirit, unbiased by political events or internal difficulties. These difficulties were only too obvious at times, but frank, earnest discussions were possible and mutual contributions were made that were of great value. Probably as important as anything else was the re-establishment of friendly professional relations between groups that had been cut off from normal scientific contacts for many years.

GASTRIC SUCTION: A PROPOSED ADDITIONAL TECHNIC FOR THE PREVENTION OF ASPHYXIA IN INFANTS DELIVERED BY CESAREAN SECTION

A Preliminary Report

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IN THE course of a study involving approximately 500 infants born to diabetic mothers,[1] it became evident that respiratory difficulty, consisting of increased respiratory rate, cyanosis and retraction of the soft parts of the chest, was the most consistent abnormal finding in the neonatal course of these infants. These signs were frequently present at birth but also appeared several hours after birth and could not be correlated with hypoglycemia, cerebral injury or atelectasis, or with the cardiac hypertrophy that Miller[2] has found in such infants. The great majority of these infants had been delivered by cesarean section; it is well known that the incidence of respiratory difficulty and the mortality rate are higher in infants born by section than in those delivered through the pelvis. It therefore appeared possible that the mode of delivery was in part responsible for the abnormal respiratory signs noted in the infants of diabetic mothers. Delivery by cesarean section increases the likelihood of aspiration of amniotic fluid, and such aspiration seemed a likely explanation for the obstructive respiratory signs present immediately after birth. The aspiration of amniotic fluid during birth did not, however, appear to be an entirely satisfactory explanation for the sudden development of respiratory difficulty several hours after birth. It occurred to us that an excessive amount of amniotic fluid might be ingested at delivery and subsequently be regurgitated and aspirated, thus accounting for the late onset of respiratory embarrassment.

To test this hypothesis two series of infants of diabetic mothers were studied. All mothers received spinal anesthesia without analgesia and were delivered by cesarean section in the thirty-eighth week of pregnancy by the same obstetrician (Dr. Raymond S. Titus). All infants were observed at birth by one of us (S.S.G.), and all initial gastric suctions were performed by the same person. The infants were extracted as quickly as possible to minimize the opportunity for crying or gasping before extraction of the head. The clearing of the airway and the administration of oxygen were performed in a uniform manner in all infants. Gastric suction was carried out within one or two minutes of birth by means of a No. 10 French rubber catheter passed through the oropharynx. A resuscitator supplied the negative pressure for suctioning. The catheter was passed slowly down the mouth into the esophagus, with constant suction applied and with slow, rotating movements of the catheter between the fingers. When the catheter reached the stomach, gentle pressure was applied over the abdomen to facilitate the greatest yield of fluid. The catheter was withdrawn slowly, still with constant suction applied. Tracheal catheterization was not carried out in any of the patients. Oxygen was then administered for approximately one or two minutes, after which the stomach suction was performed two or three more times until fluid could no longer be obtained. The infants were placed in incubators with oxygen flowing constantly at the rate of 6 liters per minute. Suction of the nares, nasopharynx, mouth and oropharynx was carried out as often as appeared necessary. After initial gastric suction had been performed, this

TABLE 1. *Gastric Suction in Infants of Diabetic Mothers Delivered by Cesarean Section.*

Infant No.	Birth Weight		Volume of Gastric Contents	Clinical Course
	lb.	*oz.*	*cc.*	
1	8	13	35	Normal
2	5	11	20	Normal
3	6	½	12	Normal
4	8	8½	14	Normal
5	6	2¼	15	Normal
6	7	1	26	Normal
7	7	14½	24	Normal
8	4	9	14	Retraction at birth; infant cyanotic and limp; retraction continued for a few hours, and subsequent course normal.
9	8	6	17	Retraction at birth; complaining cry; course normal on the next day.
10	7	15	10	Normal
11	6	13¼	20	Normal
12	6	9½	24	Normal
13	7	3½	36	Normal
14	7	13	18	Normal
15	8	13¼	20	Slight retractions lasting 48 hours
16	6	15	20	Normal
17	7	6	24	Normal
18	9	5	15	Normal
19	10	8	20	Normal
20	8	—	28	Normal
21	7	4	18	Retraction at birth and for first four hours; remainder of course normal.
22	8	2	10	Normal
23	7	7	24	Normal
24	9	—	26	Normal
25	5	2	15	Normal

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procedure was repeated by the nurse on duty every three hours for twelve hours. No attempt to reduce oxygen was made until the fourth day of life. Glucose feedings were started at thirty-six to forty-eight hours after birth, and a 2 per cent milk formula at seventy-two hours. All infants received their feedings in the incubator and were under constant observation by nurses with long experience in the care of infants of diabetic mothers. Daily physical examinations were performed by the same physician. Examination of the gastric contents revealed the presence of cornified epithelial cells, lanugo hair and shreds of blood and mucus.

In Table 1 are listed the birth weights of the infants, the total quantity of gastric contents and the positive findings, if any, noted during the early neonatal period. In Table 2 similar data for the control group of infants in whom gastric suction was not performed are recorded. Identical studies were conducted on infants of nondiabetic mothers delivered at term under spinal anesthesia by cesarean section because of disproportion. These infants were delivered by various obstetricians; the findings are summarized in Table 3. To compare the quantities of gastric contents of such infants with those of infants delivered by low forceps, an additional group was studied and is summarized in Table 4. Finally, 5 infants of diabetic mothers delivered by low forceps, whose gastric contents were measured, are included in Table 5. Figures for gastric contents apply only to the material obtained within the first few minutes after delivery. Material obtained subsequently was not included.

Results

Infants of Diabetic Mothers

The small number of patients studied, together with variables introduced by differences in birth weight, severity and duration of diabetes in the mother, ease and rapidity of delivery and so forth, makes a statistical comparison of the "diabetic" groups impossible. However, the clinical course of the two groups of infants differs considerably. Four infants in the group receiving gastric suction (Table 1) developed mild respiratory difficulties; in all 4, abnormal respiratory signs were present at birth. Of the 25 infants who did not receive suction (Table 2) 15 developed respiratory difficulties; 9 of these were normal at birth, and respiratory embarrassment subsequently appeared. The severity of respiratory embarrassment was much more marked in this group of infants. There were no deaths in either group, and all infants breathed spontaneously at birth. The gastric contents obtained in the group

Table 2. *Course of Infants of Diabetic Mothers Delivered by Cesarean Section in Whom No Gastric Suction Was Performed.*

Infant No.	Birth Weight		Clinical Course
	lb.	oz.	
1	6	15	Normal
2	8	4	Infant normal at birth; on second day began to retract and respirations became rapid; was normal by third day.
3	8	1	Infant normal at birth; on second and third days retracted considerably and was moderately cyanotic, and respiratory rate was increased; course normal thereafter.
4	5	5	Cyanosis and retraction at birth; on second day retractions continued, but color was good; on third day retractions ceased; on seventh day patient became cyanotic; cyanosis cleared with oxygen, and course subsequently normal.
5	8	4	Normal
6	5	8	Normal
7	5	3	Infant normal at birth but suddenly developed retractions and increased respiratory rate at two hours; on second day had three cyanotic attacks together with persisting retractions and elevated respiratory rate; course subsequently normal.
8	9	8	Slowly clearing cyanosis at birth, retraction and increased respiratory rate, which continued through first five days; on third day respirations became very labored; after fifth day course normal.
9	6	6	Normal
10	6	4	Infant normal at birth; on second day became cyanotic, and had cyanotic attacks during first ten days; thereafter course normal.
11	8	4	Infant normal at birth; on second day developed cyanosis and retractions, which were intermittent for two days and then disappeared.
12	5	9	Infant normal at birth; on sixth day developed cyanosis while oxygen was not being administered but cyanosis cleared with oxygen and course normal thereafter.
13	4	1	Cyanosis and retraction at birth; cyanosis cleared, but infant continued to retract for three days.
14	10	—	Moderate cyanosis and retraction at birth; cyanosis cleared in oxygen, but retractions continued for two days.
15	7	14	Infant normal at birth. On second, third, and fourth days moderate retraction.
16	7	5¼	Normal
17	7	8½	Normal
18	6	9½	Cyanosis at birth, with increased respiratory rate, retractions and complaining cry; on second day color improved, and complaining cry was gone; patient continued to have intermittent cyanosis during first seven days.
19	7	1	Normal
20	6	4	Infant normal at birth; moderate cyanosis and retractions began at six hours and lasted approximately fourteen hours.
21	8	14	Normal
22	9	3	Infant normal at birth; three hours later developed sudden increase in respiratory rate with cyanosis and retractions lasting twenty-four hours.
23	8	2	Normal
24	8	6	Normal
25	10	2	Retraction and cyanosis at birth; these signs cleared in subsequent three hours, but increased respiratory rate persisted for two days.

receiving suction ranged from 10 cc. to 36 cc. with an average of 20 cc. Of the 5 infants delivered by low forceps (Table 5) 1 infant whose gastric contents totaled 14 cc. had respiratory difficulty immediately after delivery. The other infants yielded 0 to 7 cc. and had a normal course.

Infants of Nondiabetic Mothers

Two of the 12 infants delivered by section (Table 3) developed respiratory difficulty, and the gastric contents in this group averaged 14 cc., with a range of 6 cc. to 28 cc. Because of the small numbers of infants it appears futile to compare the incidence of abnormal respiratory signs in infants of diabetic mothers delivered by section with that of infants of nondiabetic mothers similarly delivered. None of the infants of nondiabetic mothers delivered by low forceps (Table 4) developed abnormal respiratory signs; the average quantity of gastric contents was 2 cc., with a range of 0 cc. to 7 cc.

TABLE 3. *Course in Infants of Nondiabetic Mothers Delivered by Cesarean Section Because of Disproportion in Whom Gastric Suction Was Performed.*

Infant No.	Birth Weight		Volume of Gastric Contents	Clinical Course
	lb.	*oz.*	*cc.*	
1	8	2	10	Normal
2	7	1	14	Retraction and cyanosis at birth, clearing in fifteen minutes, remainder of course normal.
3	8	4	28	Normal
4	5	8	10	Normal
5	5	14	19	Retraction at birth; mild cyanosis at twelve hours, together with retractions, lasted two days.
6	8	11	8	Normal
7	6	10	12	Normal
8	7	7	21	Normal
9	7	1	16	Normal
10	6	15	14	Normal
11	8	4	17	Normal
12	5	10	6	Normal

As a result of these preliminary studies the following conclusions seem justified: infants of nondiabetic mothers delivered by low forceps have very small amounts of gastric contents; infants of diabetic and nondiabetic mothers delivered by cesarean section have large amounts of gastric contents immediately after birth; and gastric suction in infants of diabetic mothers delivered by section appears to decrease the frequency of respiratory difficulty following birth.

Discussion

It has been a matter of record for some years that the incidence of respiratory difficulty is higher after cesarean section than after delivery through the pelvis.[3-9] Several factors have been demonstrated to be responsible for the initial apnea seen in infants delivered by section: general anesthetics and certain analgesics, notably morphine, have been repeatedly shown to produce depression.[5, 7, 8, 10, 11] Some of the maternal indications for section such as placenta previa and premature separation are in themselves injurious to the infant because of oxygen deficiency in utero. Premature infants, whatever the reason for prematurity, do not stand section well.[5]

TABLE 4. *Course in Infants of Nondiabetic Mothers Delivered by Low Forceps in Whom Gastric Suction Was Performed.*

Infant No.	Birth Weight		Volume of Gastric Contents	Clinical Course
	lb.	*oz.*	*cc.*	
1	8	2	2.0	Normal
2	7	4	1.0	Normal
3	7	8	1.5	Normal
4	6	5	0	Normal
5	9	1	1.0	Normal
6	8	4	4.0	Normal
7	7	4	6.0	Normal
8	7	7	0	Normal
9	6	1	1.0	Normal
10	5	10	0	Normal
11	8	2	0	Normal
12	8	7	4.0	Normal
13	6	9	7.0	Normal
14	5	—	4.0	Normal
15	4	9	0	Normal

Several observers have suggested that physiologic birth through the pelvis has a role in the preparation of the infant for extrauterine respiration. The role is unfilled when birth is by section, and its lack may be productive of delayed respirations. Bloxsom[11, 12] suggests that the intermittent pressure of the uterine contractions upon the chest wall may condition the infant to postnatal respiratory movements; the uterine contractions may indirectly influence the onset of breathing by accustoming the respiratory centers to fluctuating levels of oxygen and carbon dioxide produced by the fluctuating placental blood flow. Moulding of the head as it passes through the birth canal may produce a local excess of carbon dioxide and deficit of oxygen in the medulla, and thereby stimulate respiration; certainly, intrauterine asphyxia is productive of respiratory motions in utero.[13]

TABLE 5. *Course in Infants of Diabetic Mothers Delivered by Low Forceps in Whom Gastric Suction Was Performed.*

Infant No.	Birth Weight		Volume of Gastric Contents	Clinical Course
	lb.	*oz.*	*cc.*	
1	8	7½	7	Normal
2	4	4	14	Weak cry at birth, rapid respirations and retraction, lasting ten hours.
3	6	15	2	Normal
4	7	8	4	Normal
5	7	7	0	Normal

It has been suggested that delivery through the pelvis performs a physiologic cleansing of the upper

respiratory tract by the compressive action of the birth canal upon the chest of the infant[14-17] and that such cleansing serves to remove much debris that would otherwise be aspirated with the first breath. Russ and Strong[9, 18] have demonstrated this by their findings of increased amounts of material in the tracheas of infants delivered by cesarean section. The improvement in mortality rate and in the incidence of respiratory difficulty that they found after the use of routine tracheal catheterization attests to the practicality of their observations.

In infants delivered by cesarean section a syndrome of delayed respiratory difficulty of an obstructive nature has been repeatedly described with unusual uniformity[9, 17, 18]: a presumably normal infant, after cesarean section and routine newborn care, develops signs of respiratory distress minutes to hours after delivery. There may be mild or marked inspiratory retraction, with dyspnea, tachypnea and cyanosis. Restlessness, a weak, high-pitched cry and at times convulsions may be present. Oxygen therapy is efficacious at the start, but the signs tend to recur with increasing severity and decreasing response to oxygen; death may ultimately occur with cyanosis and respiratory obstruction.

The cause of this delayed respiratory distress may logically be sought in the process of birth itself. The observations of Russ and Strong[9, 18] provide one explanation. The increased amount of fluid in the upper respiratory tract of these infants must necessarily be inhaled with the first breath unless removed by the physician. That this may not produce immediate symptoms is shown by the autopsy findings of Russ and Strong and by the observations of Farber and Sweet.[19] Aspirated material at first lies loosely distributed in the alveolar spaces, but each successive breath packs the debris against the alveolar walls, forming the "asphyxial membrane" composed of amniotic detritus, meconium, lanugo and vernix. Delayed respiratory obstruction is dependent on an increasingly impervious intra-alveolar membrane.

Potter and Rosenbaum[17] have described an increase in the amount of cerebrospinal fluid producing external hydrocephalus at autopsy in this syndrome. Since asphyxia causes a transudate as an early manifestation[20] they believe that asphyxia is responsible for this syndrome, perhaps supported by the effect of the sudden pressure changes incident to abdominal delivery.

The present paper attempts to add another possible cause of delayed respiratory distress of the infant delivered by cesarean section — namely, ingestion with subsequent regurgitation and aspiration of amniotic fluid, blood and mucus. It is further suggested that routine gastric suction immediately after delivery by section should be performed in addition to the accepted measures for neonatal care. Mention of the use of gastric suction is not made in any of the standard textbooks of obstetrics or pediatrics. A review of the literature over the past thirty years, however, reveals that Slawik,[21] in 1925, recommended gastric lavage within the first two hours of life whenever asphyxia was present or the amniotic fluid appeared contaminated. He proposed thereby to prevent absorption of bacteria through the gastrointestinal mucosa, with consequent generalized sepsis, and to prevent aspiration of the material into the lungs. Although he reported that gastric suction was without harmful effects, he failed to advance convincing evidence of the validity of his proposal. The literature presents few figures on gastric contents of normal newborn infants with which to compare our findings. Only fifteen observations are recorded within one hour of birth[22, 23]; the average content is 4.9 cc., with a range of 0.5 to 10.0 cc. If observations in the first twenty-four hours of life are included, 119 cases are available[22-24]; here the range is 0.5 to 12 cc., with an average of 3.7 cc. The average anatomic capacity of the newborn stomach is given as approximately 30 to 35 cc.[25-27] Although our series is small, it is evident that the gastric content of infants delivered by cesarean section is greater than that of infants delivered through the pelvis and, in some cases, approaches the maximum distensibility or anatomic capacity of the stomach. Whether or not the greater volume of gastric contents in infants of diabetic mothers is related to hydramnios, which occurs frequently in the pregnant diabetic patient, remains to be investigated.

To determine the value of gastric suction in the neonatal care of infants delivered by cesarean section a much larger group of normal infants together with controls will be required; the present study is subject to criticism because of the large number of infants of diabetic mothers.

Summary

In an unpublished review of the neonatal course of the infants of diabetic mothers the outstanding abnormal signs consisted of cyanosis, dyspnea, tachypnea and retraction of the soft parts of the chest. These signs occurred immediately at birth or within several hours of birth. The majority of the infants were delivered by cesarean section; such signs not infrequently complicate the course of infants of nondiabetic mothers delivered by section. On the supposition that delayed respiratory signs of an obstructive nature might be due to the ingestion of large amounts of amniotic fluid followed by regurgitation and aspiration, a study was conducted on infants of diabetic mothers delivered by section to determine the effect of gastric suction on the frequency of these signs.

Of 25 infants receiving gastric suction at birth, 4 showed respiratory embarrassment that was present at birth, and none developed delayed

respiratory difficulty. Of 25 infants in whom suction was not performed, 15 developed respiratory difficulty; in 6 it was present at birth, but 9 of the fifteen showed a delayed onset of obstructive signs.

The average quantity of gastric contents in infants of diabetic mothers, all of whom were delivered by cesarean section, was 20 cc. An average of 14 cc. of fluid was obtained from the stomachs of infants of nondiabetic mothers delivered by cesarean section because of disproportion. Infants of nondiabetic mothers delivered by low forceps yielded an average of 2 cc.

In view of the marked difference in the neonatal course of infants who received gastric suction and of those who did not, it is proposed that gastric suction at birth be carried out in infants delivered by cesarean section, in addition to the procedures now commonly employed for the prevention of asphyxia. Whether or not gastric suction will affect the clinical course of infants of nondiabetic mothers delivered by cesarean section remains to be determined.

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GYNECOMASTIA IN ASSOCIATION WITH CHRONIC ULCERATIVE COLITIS*

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During recent months the problem of gynecomastia has received increasing attention, especially its association with impaired hepatic function[1, 2] and malnutrition.[3-5] Among the complications of chronic ulcerative colitis, liver disease has most recently attracted attention.[6-8] The following case report is that of a patient with chronic ulcerative colitis who showed both hepatic impairment and gynecomastia and whose clinical picture was of such a nature as to allow some speculation regarding the pathogenesis of the latter condition.

Case Report

A 24-year-old man had been in excellent health until 1944. At that time he developed frequent, painful, urgent, bloody, often watery stools, together with loss of appetite, weight and strength. Examination in an Army general hospital revealed no significant abnormalities. After a period of intensive therapy with antibiotics, a high-vitamin diet, parenteral administration of liver and a number of antidiarrhea compounds, improvement took place, and the patient was discharged with a diagnosis of simple diarrhea. He remained well for about 6 months until, in April, 1945, the symptoms recurred. Further studies were performed, and a diagnosis of chronic ulcerative colitis was made after sigmoidoscopic examination. Mild symptoms continued throughout 1945. During the first 2 or 3 months of 1946 the patient was asymptomatic, but in April the original symptoms returned with full severity and continued throughout the summer with some amelioration in the early fall.

During November and December, 1946, together with recrudescence of marked gastrointestinal symptoms, there was a severe attack of polyarthritis. Throughout the early part of 1947 he continued to have severe diarrhea, and there was a steady loss of weight. In March glycosuria and hyperglycemia were first noted; small doses of insulin were given, and after a time the glycosuria disappeared. The patient had never shown glycosuria previously, and the family history was entirely negative for diabetes.

In May, 1947, the intestinal symptoms had become so severe and loss of weight so profound, that ileostomy was performed. After this procedure there was marked improvement, with a return of appetite and a steady gain of weight.

The patient continued a very high vitamin B intake for some weeks after the operation, but then, since he felt so well, he began to discontinue the use of extra vitamins until finally, in the latter part of the summer, he was taking no supplementary vitamins of any sort. Glycosuria reappeared, and large doses of insulin were necessary for control. Shortly

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thereafter the patient first noticed a tender mass in the left breast. This mass increased in size, and soon thereafter a similar mass appeared in the other breast. At about the time that the breast changes were most severe, the patient underwent colectomy. At this time both breasts showed firm, well demarcated masses measuring in diameter 5 cm. on the right and 3.5 cm. on the left. They were freely movable, and the one on the right was tender. There was a moderate amount of palmar erythema, but no cutaneous telangiectasias were observed. Both testes were present in the scrotum and were of normal size and consistence. The patient could recall no previous occurrence of mammary tenderness or enlargement.

Liver biopsy taken at the time of the colectomy showed early parenchymatous degeneration, with slight fibrosis. The postoperative course was very stormy. The diabetes increased greatly in severity, and the patient became mildly jaundiced. However, during the next few weeks there was gradual improvement on a therapeutic regimen that included high-vitamin intake, blood transfusions, antibiotics and insulin. At this time the gynecomastia gradually diminished. Shortly after discharge from the hospital he continued to improve, and the glycosuria subsided to a point where only small doses of insulin were required. At this time a decrease of the vitamin intake was again followed by aggravation of the diabetes but without any further changes in the breasts, which then showed barely palpable masses. Again, after a more adequate intake of vitamins, there was improvement of the diabetes. This improvement, however, was only temporary, and since that time the patient has continued to require large doses of insulin even though on a very adequate vitamin intake. The salient features of the clinical course are shown in Figure 1.

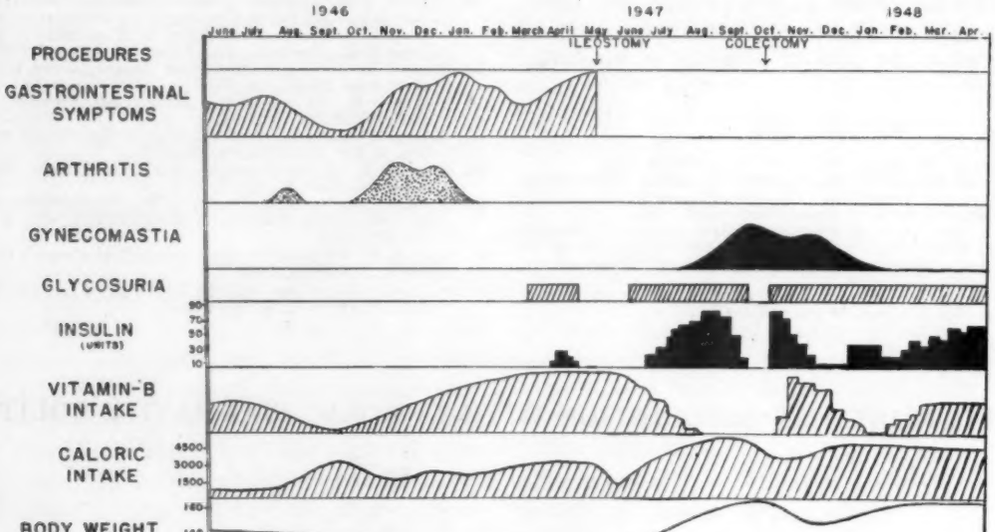

FIGURE 1. *Clinical Course.*

DISCUSSION

Several points are worthy of emphasis. Although there was evidence of hepatic disease the gynecomastia did not develop while the liver disease was presumably most severe. Rather, the mammary enlargement appeared when the patient was eating heavily, gaining weight and in much improved general condition, but at a time when he was beginning to neglect his vitamin intake.

The development of diabetes without the usual familial background and during the height of the ulcerative colitis could well have been associated with impaired hepatic function. Of further interest is the fact that there was marked increase in the severity of the diabetes during the period when the gynecomastia appeared. Some correlation may be seen between the increase in severity of the diabetes and the cessation of adequate intake of vitamin B. However, the increased insulin requirement can also be correlated with increased caloric intake.

Although breast enlargement in the male is occasionally due to a neoplasm, by far the more common causes are either excessive deposition of fat (pseudogynecomastia) or development of glandular tissue similar to that of the female breast (true gynecomastia). These conditions are frequently confused. Gynecomastia may be divided into three forms: that appearing in boys at the time of puberty, referred to by Jung[9] as the subareolar node; idiopathic or "nonhormonal," a type described much more frequently in the surgical than in the medical literature and less often described since the advent of more intensive metabolic studies; and true or "hormonal" gynecomastia. The last type is seen in numerous conditions, the majority of which allow a fairly reasonable hypothesis regarding the pathogenesis of the mammary enlargement. The more important causes of true gynecomastia are summarized in Table 1. Only those types that have a possible application to the case reported here are discussed in any detail.

Gynecomastia has been noted for many years as a not uncommon feature of hepatic cirrhosis. When testicular atrophy is also present, the combination is referred to as the Silvestrini–Corda syndrome. The mechanism of the development of

gynecomastia has never been definitely established. It is a basic premise that administration of estrogens will cause development of the male breast. In addition, there is considerable laboratory and clinical evidence that estrogens are not normally inactivated when hepatic function is impaired. Consequently, one feels quite secure in holding to the theory that gynecomastia in liver disease results from an excessive amount of circulating estrogen. Other features of cirrhosis attributable to an excessive amount of circulating estrogen are spider angiomas, testicular atrophy, "liver palms," decreased growth of axillary hair, impotence and loss of libido in the male, and change of menstrual pattern in the female. The possibility that testicular atrophy in patients suffering from cirrhosis of the liver develops on a nutritional basis and the well documented association of other types of testicular atrophy with gynecomastia lend some support to the idea that gynecomastia in liver disease may be secondary to testicular changes. However, experimental production of testicular atrophy by administration of estrogens, especially in the presence of hepatic disease, validates the concept that both this complication and that of mammary enlargement may be due to insufficient inactivation of estrogens.[10] The liver disease usually accompanied by gynecomastia is cirrhosis. Edmondson[11] noted this fact and asked why a similar development could not take place in less chronic liver disease. Since then Klatskin[2] has reported 2 cases of gynecomastia in patients with infectious hepatitis.

TABLE 1. *Major Causes of Gynecomastia.*

Testicular tumors
Teratomas and chorioncarcinomas
Interstitial-cell tumors (? adrenal-cell rests)
Testicular atrophy
Klinefelter's syndrome
Secondary to orchitis, trauma and so forth
Hepatic cirrhosis
Infectious hepatitis
Malnutrition
Hyperthyroidism
Adrenal disease
Cortical tumors or hyperplasia
Addison's disease
Therapy with desoxycorticosterone acetate or cortical extract
Treatment with estrogenic hormones
Treatment with androgenic hormones
Miscellaneous
Prostatectomy
Pulmonary disease
Leprosy and so forth

It is of interest that the patient described above showed histologic evidence of hepatic disease. Considerable attention has recently been paid to the frequency of hepatic disease in patients suffering from chronic ulcerative colitis. Tumen, Monoghan and Jobb[6] reported 5 cases with cirrhosis among 151 patients with colitis and noted in all marked hypoalbuminemia that was strikingly refractory to treatment. Johnson[7] reviewed 25 cases of chronic ulcerative colitis and found that a palpable liver had been noted in 5. Two of these patients were studied and proved to have hepatic insufficiency. After reviewing the possible causes of the insufficiency he concluded that a combination of the factors of poor nutrition and absorption of toxic substances from a diseased bowel could be operative.

During World War II the incarceration of large numbers of prisoners by the Japanese provided an optimal environment for the development of malnutrition on a mass scale. In addition to other developments in prisoners kept for long periods on semi-starvation diets, gynecomastia was frequently noted. Malnutrition in its far-reaching effects on the human organism provides a number of possible mechanisms for the development of gynecomastia:

Undernourishment may cause hypofunction of the pituitary body, with consequent secondary impairment of activity of such target endocrine organs as the adrenal glands and gonads.

Testicular atrophy may result from deficiencies of specific nutrients necessary for preservation of testicular structure and function.

Vitamin deficiency, especially lack of components of the B complex, could well be the important factor. Of interest in this regard is the experimental work of Biskind,[12, 13] who found that whereas inactivation of estrogen requires the presence of adequate amounts of vitamin B_6 androgen inactivation does not. Consequently changes in the androgen-estrogen ratio could readily occur in patients deprived of these vitamins.

Hepatic impairment of a primary type or aggravation of latent mild liver disease with consequent inactivation of estrogens as outlined above must be considered as a possibility in all poorly nourished patients.

One of the most interesting features of the gynecomastia seen in malnourished prisoners of war was either primary development or increase in severity when the prisoners were allowed a more liberal diet. This observation, made first by Klatskin[3] and later elaborated upon by Jacobs,[5] may have considerable bearing on the pathogenesis of certain types of gynecomastia and is directly applicable to the case reported above. Jacobs has suggested that during the period of starvation lack of normal amounts of hormone-building material results in deficient production of the steroid hormones. This deficiency is rapidly overcome upon resumption of a more adequate diet. The hepatic impairment resulting from prolonged malnutrition is slower of recovery, with consequent temporary lack of inactivation of the newly formed estrogens.

Resumption of adequate caloric intake after a prolonged period of starvation causes rapid depletion of vitamin stores and calls for a greatly increased vitamin intake. As Klatskin[3] has pointed out, unless the vitamins are supplied a period of relative vitamin deficiency may exist. Inasmuch as estrogen inactivation seems to depend on adequate amounts of vitamin B, whereas that of androgen does not, temporary reversal of the androgen-estrogen ratio may result. When one passes from a state of semi-starvation to one of more adequate nutrition the obvious result should be an increase in tissue-affecting hormones secondary to increased pituitary activity or to a more adequate intake of hormone precursors. The theoretical possibility exists that

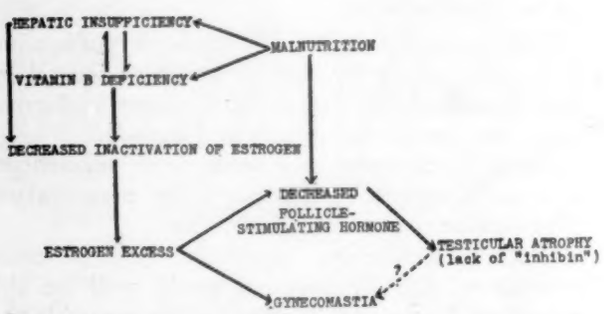

FIGURE 2. *Possible Mechanisms in the Development of Gynecomastia.*

if the increased diet contains sufficient amounts of folic acid, mammogenic action of estrogens might be enhanced, for Hertz[14] has demonstrated such synergism on the reproductive tract of chicks given both stilbestrol and folic acid.

Although the development of gynecomastia in such conditions as lead to malnutrition or impairment of hepatic function cannot be simply explained, the theory of estrogen excess appears quite credible. The appearance of gynecomastia in other conditions is much more difficult of explanation. One of the most interesting is the syndrome described by Klinefelter[15] in which there is gynecomastia, atrophy of the testicular tubules, normal Leydig cells and a high titer of pituitary gonadotropins. The presence of increased gonadotropins, together with normal interstitial cells of the testes, speaks for deficiency of some testicular hormone other than androgen. Klinefelter believes that the deficiency is such as to prevent inhibition of androgenic activity and advances the presumption that androgen is, when uninhibited, a mammogenic hormone. The possibility that this inhibitory substance arises from the Sertoli cells is given credence by the observations of del Castillo.[16] He described a number of patients similar to those of Klinefelter so far as tubular destruction was concerned except that Sertoli cells were present. These patients had no gynecomastia, and pituitary gonadotropins were present in normal amounts. McCullagh's[17] report of development of gynecomastia in patients with hypogonadism treated with methyl testosterone lends further support to the probability that the male hormone is potentially able to cause glandular development in the male breast.

Even more confusing is the occurrence of gynecomastia following administration of desoxycorticosterone,[18, 19] a synthetic steroid hormone that is a potent regulator of salt and water although it cannot ordinarily be implicated as affecting sexual structures. It is not inconceivable that some metabolic product common to several of the steroid hormones is the active mammogenic agent. A diagram expressing the possible mechanism of development of gynecomastia under conditions of hepatic insufficiency, vitamin deficiency and malnutrition is shown in Figure 2.

Why one person develops gynecomastia while another with an identical clinical pattern of disease shows no mammary-gland changes remains a problem. End-organ sensitivity or unresponsiveness can always be advanced as a simple but logical explanation. In this regard the observation of Jacobs[5] is of interest. He noted that 15 per cent of patients with gynecomastia gave a history of having had previous breast enlargement at the time of puberty. It is possible that the breast in certain male patients is oversensitive and therefore responsive to amounts of circulating estrogen that in other persons are incapable of causing mammary stimulation.

Granting the fact that the pathogenesis of gynecomastia is complex, it remains a clinical entity of considerable diagnostic and therapeutic import. Its appearance should call for investigation aimed in the direction of ruling out all the possible etiologic factors presented in Table 1. When seen in any patient with hepatic disease or with a basic disease that may lead to malnutrition, gynecomastia should be accepted as an indication for more active therapy.

SUMMARY

A case that showed chronic ulcerative colitis, hepatic disease, diabetes and gynecomastia is presented. Various possibilities regarding the pathogenesis of the gynecomastia are discussed. Evidence is presented that the breast changes were probably due to a relative vitamin B deficiency.

Gynecomastia is discussed especially in respect to its appearance in hepatic disease, vitamin B deficiency and malnutrition. Emphasis is placed on the fact that a reasonable hypothesis can be advanced to explain the "hormonal" types of gynecomastia.

The importance of recognizing the presence of gynecomastia rests in its value, not only as a diag-

nostic clue in several conditions but also as an index of therapeutic control in patients with malnutrition or liver disease.

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EOSINOPHILIC GRANULOMA OF RIB*

Report of a Case Observed for Eight Years

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EOSINOPHILIC granuloma of bone has been regarded as a disease that occurs in children and young adults and locally has a rapidly progressive course. A recently observed case has directed attention to the fact that the disease occurs in the older age groups and that its course can extend over a period of years.

Case Report

A 46-year-old laborer entered the hospital on November 14, 1939, for the repair of a left indirect inguinal hernia. A routine roentgenogram of the chest revealed an area of decreased density posteriorly in the medullary portion of the left tenth rib. The area was sharply defined and noninvasive in character, and associated with slight expansion and thinning of the cortex. A radiologic diagnosis of bone cyst was made (Fig. 1).

Examination of the blood disclosed a red-cell count of 4,690,000, with a hemoglobin of 90 per cent, and a white-cell count of 7250, with 64 per cent neutrophils, 34 per cent lymphocytes and 2 per cent monocytes. There were no symptoms or physical findings associated with this lesion. After a left inguinal herniorrhaphy and an uneventful postoperative course the patient was discharged.

During a readmission to the hospital for asthmatic bronchitis on November 30, 1946, roentgenologic examination of the chest again showed a symmetrical area of irregular bone density, 1.5 cm. by 2 cm., in the left tenth rib in the posterior axillary line. Examination of the blood revealed a white-cell count of 9000, with 60 per cent neutrophils, 34 per cent lymphocytes, 2 per cent monocytes, 3 per cent eosinophils and 1 per cent basophils. There were no complaints considered referable to the rib.

On February 23, 1948, the patient was again admitted to the hospital, this time with the chief complaint of sharp pain over the left posterior portion of the lower chest of 1 year's duration, without radiation and without relation to exercise. Physical examination disclosed a small, firm, symmetrical

FIGURE 1. *X-ray Film Taken on November 21, 1939, Showing a Cystic Lesion of the Left Tenth Rib.*

mass, tender to percussion, over the left tenth rib at the posterior axillary line. A roentgenogram of the chest showed no change in the mass (Fig. 2). Examination of the

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blood demonstrated a red-cell count of 4,240,000, with a hemoglobin of 13.6 gm., and a white-cell count of 7200, with 60 per cent neutrophils, 31 per cent lymphocytes, 6 per cent monocytes and 3 per cent eosinophils; the sedimentation rate was 23 mm. in 1 hour.

On June 12, under a local field block of 1 per cent novocain, a subperiosteal partial resection of the left tenth rib was carried out. The lesion was a symmetrical, circumscribed mass without gross evidence of extension into the surrounding tissue.

FIGURE 2. *X-ray Film Taken on February 26, 1948, Showing the Same Cystic Lesion of the Left Tenth Rib.*

The pathological report (S-48-120) was as follows:

> The specimen consists of a 6.5-cm. segment of rib. In the midportion there is a fusiform swelling measuring 2.5 by 2 by 1 cm. The external surface is smooth, firm and mottled gray yellow. Section through this enlargement exhibits soft yellow-pink and brown tissue bordered by gray tissue of increased consistence. The entire lesion is surrounded by a layer of cortical bone, 2 to 3 mm. in thickness.
>
> On microscopical examination of all tissue blocks fixed in 10 per cent formalin, decalcified in 5 per cent nitric acid and stained with hematoxylin and eosin, the major part of each section consists of a vascular connective tissue containing solid sheets of macrophages with light-staining oval or lobulated nuclei and abundant cytoplasm. The cytoplasm exhibits abundant minute vacuoles. In a few areas there are focal accumulations of histiocytes and eosinophils. Encapsulating this lesion is a relatively avascular narrow border of connective tissue containing bone spicules adjacent to normal cortical bone (Fig. 3). The pathological diagnosis is eosinophilic granuloma.

Convalescence was uneventful, and the patient was discharged from the hospital 5 days after operation.

At follow-up examination 6 months later, there was no pain in the left side of the chest. Physical examination disclosed a healed operative incision posteriorly over the course of the left tenth rib. Complete roentgenologic examination of the skeleton demonstrated no local recurrence of the original lesion but disclosed discrete areas of decreased density, consistent with the early bony lesions of eosinophilic granuloma, in the left parietal bone and in the spine of the first cervical vertebra. The patient was discharged to return in 3 months for further evaluation.

Discussion

Analysis of approximately 46 cases reported to date in the literature has shown an age incidence ranging from eleven months[1] to thirty-nine years,[2] with the preponderance of cases in young children.

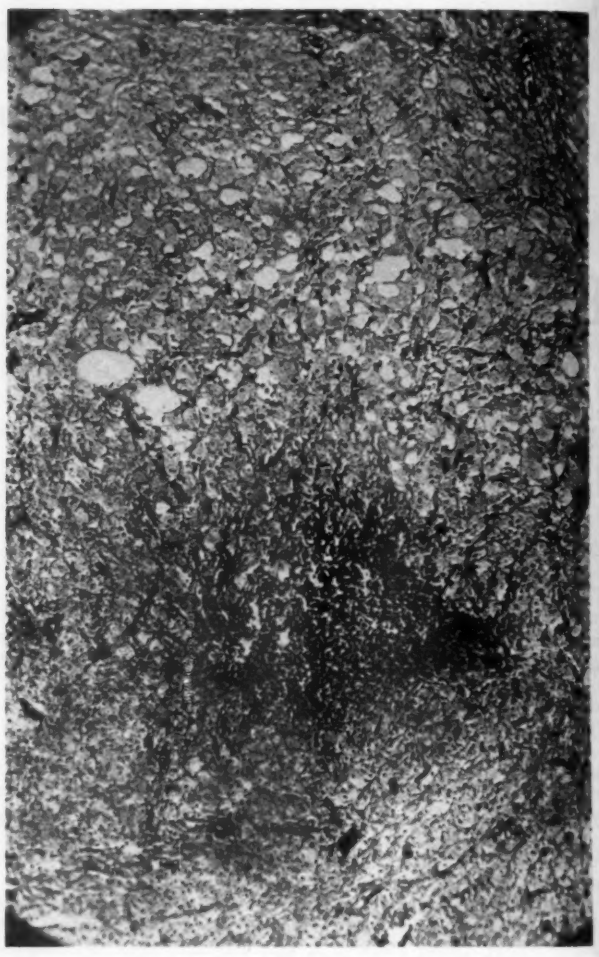

FIGURE 3. *Central Portion of the Lesion.*
Note the abundant foamy-type macrophages with one focal accumulation of histiocytes and eosinophils (hematoxylin and eosin stain x 32).

In 1944, Versiani et al.[3] presented a case report of a fifty-year-old woman with an eosinophilic and xanthomatous granuloma of the femur associated with diabetes insipidus, which was finally classified as a variation of Hand–Schüller–Christian disease. Thus, our patient, who was forty-six years of age when the lesion was first noted and fifty-five years

old when operated on, appears to be the oldest thus far recorded.

It is of significant pathological interest that this eosinophilic granuloma was under roentgenologic observation over a period of nine years with no apparent change in size, shape or invasiveness. Yet Lichtenstein and Jaffe[4] and Green and Farber[1] have observed that these destructive lesions develop rapidly, with tendencies toward bone destruction and spontaneous fractures. Throughout the period of observation, radiologic examination had revealed a circumscribed process, and at operation there was no gross evidence of extension to the periosteum. In confirmation, pathological study also disclosed that the local lesion was totally confined within a capsule of dense cortical bone.

Summary

A case of eosinophilic granuloma of the rib is reported that presented two singular features: the age of the patient, fifty-five years, when the lesion was diagnosed; and the nine-year period of observation without apparent physical change in the process.

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MEDICAL PROGRESS

SURGERY OF THE AUTONOMIC NERVOUS SYSTEM

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REPORTS dealing with various aspects of surgery of the autonomic nervous system are becoming more numerous each year. It is impossible to comment upon all of them. Consequently certain articles are referred to that have a bearing upon the topics selected for discussion in this review.

Anatomy

For some time, particularly since Richter[1] devised a practical apparatus for studying the electrical resistance of the skin, surgeons have noted that after the removal of portions of the sympathetic chain and ganglions having to do with the sympathetic innervation of a particular area, evidence of residual pathways to that area still existed. This is particularly true of the anterior half of the thigh from the groin to the knee. In a recent discussion of this matter, Ray and Console[2] have pointed out that, even after bilateral excision of the sympathetic trunks from the inferior cervical to the fifth lumbar ganglions, residual sympathetic pathways, as judged by low skin-resistance levels, were present from the twelfth thoracic to the third lumbar dermatomes. They found that these pathways could be interrupted by spinal anesthesia, resection of anterior roots, procaine block or division of the peripheral nerves, or by the administration of tetraethyl ammonium chloride. For some time, Cone[3] has been resecting the anterior roots of the twelfth dorsal and first and second lumbar segments to denervate the thigh completely in his modification of thoracolumbar sympathectomy for hypertension. These observations are of interest because they indicate that sympathetic fibers can reach the sweat glands and, by inference, blood vessels, without passing through the paravertebral ganglionated sympathetic chains. It is difficult to believe that these fibers run without a synapse somewhere between the lateral horn and the end organ. The fact that these sympathetic impulses can be interrupted by tetraethyl ammonium chloride, which blocks transmission at the synapses in sympathetic ganglions, suggests that ganglionic tissue exists. It is apparent, however, that it is somewhere other than in the usual thoracic and lumbar ganglions. A possible explanation is contained in a recent article by Skoog,[4] who found sympathetic ganglions in the communicating rami between the cervical and upper two thoracic ganglions and the spinal nerves. There was no regularity about their location. At times they were situated not far from the ganglionated chain, but at times they were very

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close to, almost within, the spinal nerves. They varied in size, sometimes being apparent to the naked eye but more often being microscopic. These are referred to as intermediate ganglions. Skoog refers to Wrete's study of embryos, in which such ganglions were found principally in relation to the lumbar and brachial plexus, and sporadically in other segments. He considered that they arose from the sympathetic ganglions. Pick and Sheehan,[5] in a detailed discussion of sympathetic rami in man, also referred to ganglions placed upon the course of rami as being surprisingly common, particularly in the lumbar region. Other studies of the anatomy of the lumbar chain[6, 7] have emphasized the marked variations in the location of the lumbar ganglions themselves from person to person and on the two sides of the same person but did not describe these intermediate ganglions. From a practical point of view, the existence of intermediate ganglions would explain failure to denervate certain areas following conventional sympathectomies. It seems advisable to remove as much of the communicating rami as possible in the performance of a sympathectomy. Under certain circumstances supplementary anterior-root section might be advisable.

Ray et al.[8] have also made important observations concerning the origin of the sympathetic nerves to the pupil and upper extremity. By stimulating anterior roots during the course of laminectomies they have determined that the fibers to the pupil arise from the eighth cervical to the fourth dorsal segment, most commonly from the first to second dorsal. They also found that fibers to the upper extremity in man arise from the second to the ninth dorsal segment. In only 1 of 16 cases was there any outflow from the first dorsal segment. They found that if any one of the anterior roots from the second to the ninth dorsal was not divided, denervation of the upper extremity was incomplete. The usual technic for denervation of the upper extremity,[9] which consists in division of the anterior roots of the second and third dorsal segments and usually the fourth dorsal, as well as section of the sympathetic trunk below the third or fourth dorsal, makes adequate provision for denervation of the upper extremity in most cases. It is apparent, however, that some residual activity may be expected in about 1 in 16 cases.

Grimson[10] has demonstrated clearly that the vagus nerves do not carry pain sensation from the abdominal viscera since stimulation under spinal anesthesia did not cause abdominal pain. Ray and Neill[11] have demonstrated that thoracolumbar sympathectomy abolishes pain from the abdominal viscera, confirming in part the observations of Bentley and Smithwick.[12] It therefore seems clear that the pain relief that follows resection of the vagus nerves for peptic ulcer is not related to the division of pain fibers. It is clear that these are contained within the splanchnic nerves.

Pick and Sheehan[5] have demonstrated that the gray communicating rami are situated proximal to the white, at least in the thoracic region. Although of no clinical importance, this observation will necessitate the revision of the drawings in standard textbooks. The authors have also determined that the most common level of origin of the highest component of the great splanchnic nerve was the sixth thoracic ganglion. In 25 human dissections this branch arose from the sixth ganglion in 11, the seventh in 7, the eighth in 4 and above the sixth in 3 cases. This is in keeping with clinical experience. Since visceral fibers of consequence do not leave the great splanchnic nerve above the ninth or tenth thoracic level, these findings do not appear to lend support to current efforts to extend thoracolumbar sympathectomy in an upward direction in the treatment of hypertension.

Several careful studies of the anatomic arrangement of the vagus nerves in the supradiaphragmatic and infradiaphragmatic areas have been made.[13-16] One gathers the impression that the fibers are indistinct in 10 to 15 per cent of cases and might easily be missed. The number of incomplete resections of the vagus nerves as judged by a secretory response to insulin hypoglycemia after operation, reported in the literature to date, approximates this figure. On anatomic grounds, the authors cited are equally divided concerning the best surgical approach to these nerves in the treatment of peptic ulcer. Half favor the transthoracic and half the transabdominal approach. Most surgeons experienced with both favor the latter, not only because it seems to be equally satisfactory from an anatomic point of view but also because it permits inspection of the lesion and supplementary gastric surgery if indicated. It is essential that surgeons appreciate all the anatomic variations of the vagus nerves if incomplete resections are to be reduced to a minimum. It is important also to realize that the identification of all the fibers of the vagus nerves depends to no small extent upon the surgeon's sense of touch.

Physiology

After resection of the vagus nerves, decreased peristalsis and delay in emptying of the stomach are regularly observed. These findings are apparent from both kymographic tracings[17] and roentgenographic studies.[18] In some cases motility may return toward normal in a few months. In others, abnormalities may exist for years.[19] Emptying of the stomach may be delayed in the absence of pyloric obstruction owing either to stenosis or to pylorospasm. It appears to be caused by the intact sympathetic supply that inhibits the tone and peristalsis of the stomach and intestine. Peristalsis may be increased and emptying improved by the use of

urecholine. Doryl appears to be less effective and is more toxic.

After resection of the vagus nerves, the fasting free acid levels are decreased by a third or more, and the secretory responses to sham feeding and insulin hypoglycemia are abolished. Evidence concerning the effect of operation upon the chemical or gastric phase of gastric secretion is conflicting. Stein and Meyer[20] report a marked reduction in the secretory response to histamine, whereas Schoen and Griswold[21] find no significant change and believe that the histamine effect is independent of the vagus innervation. Different methods for studying gastric secretion were used by these two sets of authors, the former employing continuous suction and the latter intermittent aspiration with phenol red as an indicator to enable them to estimate emptying and secretory rates. They believed that this technic was more accurate than continuous suction, and the differences observed might possibly be explained on this basis. On the other hand, most observers use continuous suction, and the majority have noted a material reduction in the secretory response to histamine after resection of the vagus nerves. If this is so, it suggests that the presence of acetylcholine, the chemical mediator of parasympathetic impulses, potentiates the action of histamine. Stein and Meyer refer to evidence reported by Necheles et al.[22] and by Gray and Ivy[23] indicating that this is the case. It therefore would not be surprising if after resection of the vagus nerves the secretory response to histamine was decreased. It is apparent from the observations of Wangensteen et al.[24] that epinephrine potentiates the action of histamine. There is evidence also that in low concentration, epinephrine potentiates the action of acetylcholine.[25] In other words, it is conceivable that the antral factor in man, presumably a histamine-like substance if not histamine, the vagal factor, presumably acetylcholine, and the sympathetic factor, presumably an epinephrine-like or sympathin-like substance, not only play independent roles in gastric secretory mechanisms but also may potentiate one another.

Naide and Sayen[26] have described a method of study that enables them to place patients with peripheral vascular disease into one of two groups on the basis of basal vascular tone. A person is regarded as having high vascular tone if the tips of the digits of the hands cool to below 25°C. after fifteen minutes' exposure to a constant room temperature of 20°C., unclothed except for a light gown. If the digits do not cool to this level the subjects are regarded as having low vascular tone. The authors believe that patients in the latter group will develop adequate collateral circulation in the presence of obliterative vascular disease of the lower extremities, whereas those who have high vascular tone will not. It is their practice to recommend sympathectomy for patients with high vascular tone and conservative treatment for those with low vascular tone and obliterative vascular disease. The principle of this method of study is logical and is one that I have used for many years.[9] By study of the vascular responses of a patient to a cool environment it is possible to divide persons into various categories according to the activity of their vasoconstrictor mechanism. In deciding whether sympathectomy will improve the peripheral circulation in a given case, what one really wishes to know is to what extent vasoconstriction of sympathetic origin is capable of reducing the peripheral blood flow. In discussing his experiences with the basal vascular tone test of Naide and Sayen,[26] Rector[27] pointed out that the various tests in common use today depend upon the demonstration of an increase in circulation after blocking of the sympathetic supply to an extremity. These do not measure the degree of vasoconstriction primarily but indicate whether the denervated vascular bed is capable of maximal vasodilatation. The fact is that there are patients whose peripheral circulation can be greatly reduced by vasoconstriction but cannot dilate maximally in the absence of neurogenic vasoconstriction. They can be helped by sympathectomy but might not be regarded as suitable for this operation on the basis of usual tests. Some method of study that indicates the degree to which the circulation can be reduced by the sympathetic vasoconstrictor mechanism is very much needed in the study of peripheral vascular disorders.

Considerable interest is being displayed in the use of drugs that are sympatholytic — that is, capable of blocking sympathetic impulses, both as diagnostic tools and as therapeutic measures. Coller et al.[28] discuss their experiences with the use of tetraethyl ammonium chloride as an adjunct in the treatment of peripheral vascular disease and other painful states. Grimson and his associates[29] discuss the effects of priscol on peripheral vascular diseases, hypertension and circulation in patients.

In general, it can be stated that sympatholytic drugs vary in their blocking capacity, the duration of the effect, untoward side reactions and toxic manifestations. Furthermore, by contrast with procaine block or regional sympathectomy their action is diffuse and is not confined to the particular area of the vascular bed that one may be primarily interested in. Both in diagnosis and in therapy, one is concerned with increasing the blood flow to a certain area. This blood must be diverted from other areas for the maximal effect to be obtained. If only the vascular area in question is affected by therapy, the amount of blood borrowed from other areas will be comparatively slight. If many vascular areas are affected by therapy it is only reasonable to believe that the amount of blood diverted to the area in question will not be maximal. Consequently, the therapy will not be as effective. In this problem one is confronted with a considera-

tion of the relative merits of regional sympathectomy and more generalized sympathectomy both as diagnostic and as therapeutic measures. De Bakey et al.[30] have discussed the matter from this point of view and state:

> Peripheral vascular disease is characterized by a disturbance of, or actual diminution in, the normal amount of circulating blood which reaches the part, and its effective therapy is based on improvement in the circulation or an increase in the blood supply to the part. Therapeutic measures designed to produce dilatation of the entire vascular bed do not seem rational for a disease state localized to a single peripheral part, but, in spite of the illogic of the attempt, there are numerous reports concerning the production of generalized vasodilatation as a form of therapy for peripheral vascular disease involving portions of the body. The results of these efforts are open to question; theoretically such measures are inefficient. Moreover, even if an effective agent, i. e.: with the ability to produce maximum vasodilatation, for this purpose did exist, its effect would be dangerous, the reaction would be shock-like, and the original purpose of increasing the blood supply to the local part would be completely defeated.
>
> In view of the lack of rationale in peripheral vascular disease of the use of agents intended to produce generalized vasodilatation, quite aside from their ineffectiveness and theoretical dangers, the attention should be concentrated on measures which produce local vasodilatation. The best of these measures, in our experience, is sympathetic denervation of the affected part. It is rational because it conforms with the principles of hemodynamics just laid down; it produces local vasodilatation insuring maximum improvement in the local circulation of the diseased part. It is safe, because it does not reduce the arterial blood pressure or produce serious systemic disturbances by the sudden creation of a disproportion between the total volume of the vascular bed and the total blood volume. Finally, it is effective. . . .
>
> Indeed, we have yet to find a general vasodilator which could produce in a local part, such as the toes, fingers, foot, hand, or extremity, vasodilatation equal in degree or duration to that produced by sympathetic denervation of the part.

Important physiologic observations have been reported by Wilkins et al.[31, 32] concerning the vasomotor reaction of the visceral vascular bed. These have to do primarily with the problem of hypertension. For the first time, a method of study has been devised that permits one to tell to what extent the visceral vascular bed has been denervated. By means of optically recorded readings of blood pressure from the brachial or femoral artery they have shown that vasomotor responses following various stimuli are completely abolished after thorough denervation of the splanchnic bed but are not abolished after partial denervation of this area. This procedure will be helpful in judging the relative merits of various surgical technics in the treatment of hypertension and in the study of regeneration of sympathetic nerves to the viscera. It also has been useful in studying the effect of various drugs upon the visceral vascular bed.

Clinical Application

Obliterative Vascular Disease of the Lower Extremity

The fact that the circulation of an extremity can be improved by sympathectomy in the presence of known obliterative disease both of the arteriosclerotic variety and in patients having thromboangiitis obliterans is now quite generally recognized. The selection of patients for this form of therapy is of great importance. One must not only consider the extremity in question but also evaluate the cardiovascular status as a whole in arriving at a decision for or against sympathectomy. If evidence of severe cardiac, cerebral or renal involvement is detected, sympathectomy is contraindicated. The circulatory status of the extremity in question should always be subjected to detailed study before operation. Sympathectomy should never be performed without first obtaining evidence that the procedure is almost certain to be helpful. Of the methods of study available, temporary interruption of the sympathetic supply to the extremity by procaine block and the demonstration that a definite improvement in circulation results therefrom are commonly employed. De Takats et al.[33] prefer paravertebral sympathetic block, and Cooper and Harris[34] use spinal anesthesia. Of the other methods of study, reflex vasodilatation by the Gibbon and Landis[35] technic and, more recently, the use of sympatholytic drugs should be mentioned. If any of these tests give definite evidence of temporary improvement in circulation one can be quite certain that the effect of operation will be worth while. As pointed out above, interruption of the sympathetic supply to the area in question by procaine block is likely to give more reliable information than tests that produce general vasodilatation. The latter may not cause an increase in blood flow to the extremity in question because of the shifting of blood to other areas where vasodilatation occurs more readily. The area being studied may even become cooler rather than warmer. This can lead the uninitiated to an erroneous conclusion concerning the advisability of sympathectomy. Not infrequently, this occurs in patients with a high degree of sympathetic tone in the extremity in question — in other words, in patients best suited for sympathectomy. It is wise not to attach the same significance to a negative as to a positive response to the tests mentioned. When the response is negative, one should be guided by the degree of cooling of the extremity in a cool environment — in other words, by evidence of the capacity of the vasoconstrictor mechanism to decrease blood flow through the extremity. It has been my experience that if the tips of the digits of the extremity in question cool to below 75°F. after one hour's exposure to a room temperature of 68°F., and if the collateral circulation to the extremity is adequate, operation will be helpful. This conclusion is similar to that reached by Naide and Sayen[26] except that I prefer to study the extremity in question rather than to draw conclusions regarding the lower extremities from a study of the upper extremities only. The best simple test of collateral circulation is the time required for the tips of the digits to begin to flush

in the dependent position after blanching has been induced by elevation of the extremity. If flushing begins in twenty seconds or less, one can be quite certain that the collateral circulation is adequate.

Sympathectomy for peripheral vascular disease is contraindicated, then, if the general cardiovascular status of the patient is poor or if the circulation of the extremity fails to improve after temporary interruption of its vasoconstrictor supply, except in cases in which there is adequate cooling of the digits in a cool environment associated with satisfactory collateral circulation. If sympathectomy is performed in poorly selected cases it will not only fail to improve the circulation but, as pointed out in recent years by Atlas[36] and Freeman,[37] may precipitate gangrene. Both these authors have reported cases in which the circulation of the foot was decreased after sympathectomy. They attributed this to the shunting of blood away from the capillary bed by the opening of arteriovenous shunts that followed sympathectomy. Freeman considered this most likely to occur in patients with low vascular tone. A study of his case reports suggests that while this may have been a factor, the history and symptoms indicated that a recent acute vascular occlusion occurred in 3 cases. The fourth had an injury to the foot, with fractured metatarsal bones. This suggests that the collateral circulation was inadequate at the time of operation. The 3 patients described by Atlas had poor collateral circulation, and 1 had an acute thrombosis of the femoral and popliteal arteries. The importance of an adequate collateral circulation as a prerequisite to sympathectomy in the presence of obliterative vascular disease of the main vessels cannot be overemphasized.

The recent development of satisfactory technics for more detailed clinical study of the circulation by plethysmography will no doubt further improve the selection of cases for sympathectomy. Apparatus designed by Burch[38] and Goetz[39] appears to be very satisfactory.

Causalgia

Among the sequelae of penetrating wounds with injury to peripheral nerves is a remarkable symptom complex to which the term causalgia was applied by Mitchell, Moorhouse and Keen[40] in 1864. Their patients were soldiers in the Civil War, and their description of the symptom complex that certain persons develop after peripheral-nerve injuries is regarded as a classic. Recent discussions of this matter indicate that there are descriptions of the syndrome in the literature that antedated that referred to above but to which no name was applied. Until recent years, the cause and treatment of the disorder remained a mystery, and those who suffered from it were often regarded as having a psychosis or as being malingerers. Several years ago Homans[41] wrote an excellent discussion of the syndrome. He emphasized the role that the sympathetic nervous system played in the disorder and the efficacy of interrupting sympathetic pathways by procaine block or by sympathectomy as a therapeutic measure.

Every war has produced a new group of these cases, but it was not until World War II that effective therapy was available. The policy of concentrating cases that presented particular problems and required special treatment in surgical centers had much to do with their effective management. As a result, various reports emanating from these centers have done much to clarify the signs and symptoms and the proper management of such cases. Since examples of causalgia are seen from time to time among the civilian population it seems worth while to summarize the literature that has appeared as a result of the last war. Excellent discussions have been published by Speigel and Milowsky,[42] Mayfield and Devine,[43] Ulmer and Mayfield,[44] Allbritten and Maltby,[45] Rasmussen and Freedman,[46] Kirklin, Chenoweth and Murphy,[47] Freeman,[48] Shumacker[49-51] and White, Heroy and Goodman.[52] These authors saw varying numbers of cases, and the interval between injury and treatment differed. There were variations in the signs and symptoms in the different groups, and certain features were emphasized particularly by some authors and to a lesser extent by others. It is possible, however, from these excellent discussions to obtain a fairly accurate composite picture of the problem as a whole.

Definition

Causalgia may be defined as a syndrome associated with a penetrating wound with a lesion of a peripheral nerve containing sensory fibers manifested by pain in the extremity, hand or foot primarily, that is accentuated by certain disturbing features in the patient's environment. The term should not be applied to allied post-traumatic disorders unassociated with penetrating wounds and peripheral-nerve injury.

Incidence

It is estimated that this syndrome develops in 2 to 5 per cent of peripheral-nerve injuries. It is not known why other persons with similar nerve injuries do not develop causalgia.

Onset

The pain apparently may begin immediately or within a few hours of injury. Perhaps 50 per cent of cases fall into this category. About 25 per cent of patients state that the pain begins in the course of a week, and about 15 per cent in the course of one to three weeks, and in the others it develops in the course of one to several months after injury.

Nature

The pain is most frequently described as burning in nature. In some cases, however, no thermal characteristics are noted. In the great majority, about 90 per cent, it is constant. In occasional cases it is intermittent. The pain may be throbbing, aching, twisting, knife-like, stabbing or crushing, in addition to or instead of being burning. An essential feature of the pain is that it is intensified by various factors such as moving or touching the involved part, a sudden jarring of the bed, loud noise, emotional excitement, touching the part with slick objects such as sheets of paper or with a dry but not with a wet finger, touching the patient's body at any point, looking up in the air at high objects, extremes of temperature, or the sound of certain words such as paper or slick. Most of these stimuli are thought to cause increased sympathetic outflow to the extremity.

Distribution

The pain is most commonly associated with an incomplete injury of a peripheral nerve although there apparently are a few proved cases of causalgia following complete division of nerves. It is generally confined to or most intense in the sensory distribution of the nerve injury but may spread beyond the area.

Severity

The pain was slight in about 20 per cent, moderately intense in 35 per cent, severe in 35 per cent and excruciating in 10 per cent of the cases.

Nature of Nerve Injury

No characteristic lesion has been described. There is nothing different about the nerve injury that distinguishes it from identical injuries not associated with causalgia.

Vasomotor Manifestations

Two types of vasomotor changes are described, vasodilatation and vasoconstriction. In occasional cases the vasomotor status was regarded as normal. While it is possible that the original vasomotor status persists in a given case, the evidence suggests that vasodilatation may characterize the earlier stages of the disorder and may be replaced by vasoconstriction after a number of months. In the stage of vasodilatation the skin was usually pink, warm, dry, scaly and velvety, with increased growth of hair. In the stage of vasoconstriction the skin is described as being cold, thin, glistening and sweating profusely, with decreased growth of hair. Some form of moist dressing was preferred by most patients. In general, cool applications were preferred in the stage of vasodilatation, and warm in the stage of vasoconstriction.

Trophic Changes

So-called trophic changes in the skin, subcutaneous tissues, nails, joints and bones occurred frequently and apparently were closely related in both time of onset and severity to the intensity of the pain and the degree of disease. These changes were a serious handicap to rehabilitation once the pain was relieved. The importance of early diagnosis and treatment is repeatedly stressed.

Treatment

It seems generally agreed that therapy directed to the region of the nerve injury should not be the primary procedure unless some indication for exploration other than causalgia is present. Neurolysis rarely helped, and resection and suture only occasionally relieved the pain. All authors found that paravertebral procaine block of the sympathetic supply to the extremity resulted in complete or almost complete relief of pain in the great majority of cases. In some of the milder forms, one or several blocks resulted in cure. This applied to about 20 to 30 per cent of cases. In general it was noted that if the relief exceeded the duration of the anesthetic, treatment by blocking was apt to be successful. If the duration of relief corresponded to the duration of the anesthetic, one and a half hours or less, and if the relief on repeated blocking was the same or of shorter duration, this form of treatment was almost always unsuccessful. Under these circumstances, the extremity was sympathectomized. The results of sympathectomy in 75 per cent of the cases was excellent. In 20 per cent the result was good. Failures were reported in less than 5 per cent of cases. The upper extremity was involved in 60 per cent, and the lower in 40 per cent. In general, the results of the treatment were a little better in upper-extremity causalgias than in those of the lower extremity. The procedure most frequently utilized in denervation of the upper extremity was the so-called preganglionic section. This results in a more thorough denervation of the entire upper extremity than is obtained in the lower extremity after the conventional lumbar sympathectomy. This point, as well as the possible role of intermediate ganglions in explaining incomplete denervation of the thigh following operations of any magnitude upon the thoracolumbar chain, was emphasized above. Some authors believed the site of injury as well as the area of referred pain should be completely denervated. A few cases were reported in which extension of the sympathectomy upward for several segments, after failure to relieve lower-extremity causalgias that followed removal of the second and third or first, second and third lumbar ganglions, resulted in relief. In occasional cases, the pain was not relieved until thrombosed segments of arteries or aneurysms had been

removed. Periarterial sympathectomy was found to be as ineffective as it has been in the past.

Mechanism of Pain

In spite of the fact that interruption of the sympathetic supply to an extremity almost always relieves causalgia, the mechanism for the production of pain and the explanation for its relief are not known. Some observers believe that the pain is caused by the stimulation of afferent somatic fibers at the point of peripheral-nerve injury by sympathetic efferents. This theory, which was proposed by Doupe, Cullen and Chance,[53] is in keeping with the explanation that failures following incomplete denervation of the site of injury could be due to the persistence of efferent sympathetic pathways having their synapses in intermediate rather than in the paravertebral ganglions. Other observers believe that the relief of pain is due to the interruption of afferent fibers carrying pain sensation from the extremities that pass through the sympathetic trunks and ganglions before entering the posterior roots to reach higher levels of pain perception. There has always been considerable doubt of the existence of such pathways from the extremities of man although some recent evidence has been presented by Treadgill[54] that they exist in animals. Whatever the explanation for causalgia may be, it is clear that sympathectomy is a very effective therapeutic measure.

Essential and Malignant Hypertension

In a discussion of early results of splanchnicectomy for hypertension de Takats[55] divides 250 cases followed one to six years into three groups designated as early, marked and too advanced respectively. There were 55 cases in the first, 171 in the second, and 24 in the third group. He regarded the results as satisfactory in 85 per cent of the first, in 75 per cent of the second, and in none of the third group. Failures in the first group were thought to be due to inadequate denervation in 2 cases, and were unexplained in 6. Failures in the second group were regarded as due to inadequate surgery in 5, heart failure in 7, and cerebral accidents in 6, and 13 cases were unexplained. All the failures in the third group were explained by poor case selection — that is, operation upon patients in a near-terminal stage of the disease.

Discussions of early results and the selection of cases for surgery have been reported by Hinton[56] and Smithwick.[57] The former based his discussion upon a series of 375 cases followed for six months to five years, and the latter upon a series of 439 cases followed for one to five years or more. In both papers, the circumstances under which the results were most likely to be unsatisfactory were discussed in considerable detail from the viewpoint of the individual patient. All these discussions must be regarded as preliminary, since no final evaluation of the surgical treatment of hypertension can be made until an adequate number of cases have been followed for at least five years, and preferably longer. A study of early results is, however, worth while, since the obvious failures — namely, patients who fail to survive for more than a few years after operation — can be detected and eliminated as candidates for surgical treatment in the future.

So far only two articles have appeared in the literature in which the status of a sizeable number of surgically treated patients followed for five years or more has been discussed. Peet and Isberg[58] reported upon 437 cases followed for five to eleven years, and Smithwick[59] upon 256 cases followed for five to ten years. In both series the mortality rates compared favorably with those published for nonsurgically treated cases. In the latter series[59] the mortality rates for cases grouped according to the grade of eyegrounds was considerably lower than that reported by Keith, Wagener and Barker[60] for nonsurgically treated patients. The mortality rates for both sexes were considerably lower than those for nonsurgically treated patients reported by Janeway,[61] Blackford, Bowers and Baker,[62] Keith, Wagener and Barker[60] and Rasmussen and Boe.[63] The rates for cases when arranged by resting diastolic-blood-pressure levels were also much lower in the surgical series than in that reported by Rasmussen and Boe. The progress of cardiovascular disease as judged by the course of the electrocardiogram five years or more after operation compared very favorably with that of the nonsurgically treated patients reported by Canabal et al.,[64] as well as the cases reported by Rasmussen and Boe. The differences observed in this and the other comparisons referred to were large enough to be of statistical significance.

To date, nothing has appeared in the literature to give an adequate indication of the prognosis for a specific hypertensive patient whether untreated or treated medically or surgically. Such data should shortly be available for surgically treated patients followed for five to ten years and divided into subgroups in which the most important variable factors that exist in this disorder are held constant. It will then be possible to give a reasonably accurate prognosis for a particular patient. It is desirable that similar data be accumulated for nonsurgically treated patients so that more accurate comparisons can be made of the results of various therapeutic measures. This will be most helpful in the selection of the best form of therapy for a particular patient.

Articles have appeared relating to surgical technic.[65, 66] These have to do primarily with extending the magnitude of operations for hypertension. The morbidity and mortality seem to be increased. It is doubtful whether the results will be improved sufficiently by more radical surgery to compensate for these untoward effects.

The Ulcer Problem

Numerous reports of early experiences, both favorable and unfavorable, with resection of the vagus nerves alone and in combination with other operations upon the stomach continue to appear in the literature.[67-73] Dragstedt et al.[74] correctly emphasize the need for special care in the postoperative management of these patients because of the marked disturbance of gastric motility that almost invariably occurs in the early postoperative period. Decompression of the stomach for several days after operation is essential. Feedings should consist of small quantities of clear fluids at first, with frequent estimations of gastric residue. Diet should be increased very gradually over a period of several weeks. If mechanical obstruction of the pylorus is apparent from the history, by x-ray study or by inspection of the lesion at operation, the authors believe that gastroenterostomy should be done at the time of the neurectomy. They regard their results to date as satisfactory and find no indications at present for gastric resection either alone or in combination with vagus resection in the treatment of duodenal ulcers requiring surgery.

Colp and his associates[75] compared the early results of subtotal gastrectomy alone and combined with vagus resection in two series of patients. The morbidity was increased by the combined procedure, but there was no mortality in either series. The combined procedure was much more effective in modifying both neurogenic and chemical gastric secretory mechanisms as judged by the effect upon gastric acidity. Achlorhydria was present in the fasting secretion as well as in response to food, insulin and histamine in a high percentage of the cases. If this persists, and if gastric acidity is as important as most observers believe it to be in the genesis and perpetuation of peptic ulcers, it seems likely that the combined procedure will lower the incidence of recurrent gastrojejunal ulceration. If it is not associated with a higher incidence of untoward side effects than radical gastrectomy alone, it may prove to be worth while.

To date, too few cases have been followed for an adequate period for one to reach any final conclusions regarding the relative merits of vagus resection alone, combined procedures and gastric resection only in the treatment of duodenal ulcers. Nothing but time combined with careful preoperative and postoperative studies can settle this problem. If there is any agreement upon any aspect of this matter, it seems to be the opinion of most that resection of the vagus nerves is particularly indicated in the management of gastrojejunal ulceration following subtotal gastrectomy. There is less agreement about the value of resection of the vagus nerves for gastrojejunal ulceration after gastroenterostomy. As a primary procedure, many believe that vagus resection combined with posterior gastroenterostomy is justifiable in the management of obstructing or complicated ulcer problems when the risk of resection would be increased by difficulties encountered in the management of the duodenal stump, or in obstructed patients in extremely poor condition. Some surgeons believe that vagus resection may properly be combined with subtotal gastrectomy in patients whom experience has shown to be most susceptible to recurrent ulceration after subtotal gastrectomy alone — namely, those with recurrent hemorrhages and those with unusually high preoperative acidity. The frequency with which vagus resection alone may be considered varies greatly in different clinics. In some, so-called refractory nonobstructing ulcers seem to be quite common. In others, nonobstructing ulcers requiring surgical treatment are rare. One point upon which all authors are agreed is that the place resection of the vagus nerves will occupy in the management of duodenal ulcer is still in the investigative phase. It certainly has stimulated great interest in this subject and has resulted in much more careful study of each patient than was formerly the case. In the end, this can only react to the advantage of the ulcer patient.

Excellent reviews of surgery of the autonomic nervous system have recently been published by White,[76] Grimson[77] and Goetz.[78] These articles together cover almost every phase of the subject and contain extensive bibliographies.

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MASSACHUSETTS MEDICAL SOCIETY

PROCEEDINGS OF THE COUNCIL

Stated Meeting, February 2, 1949

A STATED meeting of the Council was called to order by the president, Dr. Daniel B. Reardon, Norfolk South, on Wednesday, February 2, 1949, at 10:30 a.m. in John Ware Hall, 8 Fenway, Boston.

Two hundred and thirty-four councilors (Appendix No. 1) were present.

The President then announced the following appointments:

To the Section on Pathology and Physiology:
Dr. Monroe J. Schlesinger, *Chairman.*
Dr. Donald A. Nickerson, *Secretary.*

To the Council:
Dr. Joseph P. Marnane, Worcester North.

To the Committee to Meet with the Officers of the Bay State Medical Rehabilitation Clinic:
Dr. Alexander P. Aitken.

The President asked for approval of these appointments, and it was so ordered by vote of the Council.

The Secretary presented the record of the October 6, 1948, meeting of the Council as published in the *New England Journal of Medicine*, issue of December 2, 1948, and moved its acceptance. The motion was seconded, and it was so ordered by vote of the Council.

Reports of Committees

Executive Committee — Dr. H. Quimby Gallupe, Middlesex South, *Secretary.*

The Secretary presented the minutes of the meeting of the Executive Committee held on January 5, 1949, as mimeographed (Appendix No. 2) and mailed to the councilors. He drew the attention of the councilors to the change of time of the committee meeting, the length of it and the expanded report of discussions.

The Secretary then presented the report of the Committee on Membership (Appendix No. 3) and moved the approval of the recommendation concerning new categories of membership. The motion was seconded, and it was so voted without discussion.

The Secretary then said that there had been no business referred to the Committee by the Council and that there was only one matter of new business—namely, that concerning the American Medical Association assessment. He reviewed the information concerning this as follows:

> Immediately following the Interim Session of the American Medical Association in St. Louis on December 1, I received the following telegram from the Secretary of the American Medical Association:
>
> Recent Interim Session House of Delegates unanimously decided to assess each member of American Medical Association $25.00. You are requested to collect this assessment through your county units or any other way you desire. Bill association for any extra expense in connection with the collection.

That seemed to be rather a big job for the secretary of this society to do all by himself and without any particular authority from this society to act. My first attempt was to find out if this assessment by the American Medical Association was proper, according to their by-laws, and I can assure you that it is, so far as we are aware, because last summer at the annual session of the American Medical Association that organization produced new by-laws, which were accepted by the House of Delegates, Article 2 of which reads:

> Funds may be raised by an equal assessment of dues of not more than $25 annually on each of the active members on recommendation by the Board of Trustees and after approval by the House of Delegates.

I then approached the delegates of the Society who had attended the Interim Session. I was at St. Louis myself, but did not attend the meeting of the House of Delegates. I was there for another purpose.

Our delegates assured me that they did vote unanimously for this assessment and that they did so because the American Medical Association was without funds and had been for some time; that last year the American Medical Association had gone into the red by a considerable number of thousands of dollars; and that all their money came from subscriptions to their various journals, some of which operated in the red.

They were assured that this assessment was decided upon by the trustees of the American Medical Association previous to November 2, when Mr. Truman was elected. It was not influenced particularly by politics or proposed legislation in the Eighty-First Congress. The money was needed anyway, and our delegates assured us that it was their complete understanding that this assessment was necessary. There was a certain amount of emergency to it, and it was their understanding that it was completely voluntary and that no penalty could be dealt to anyone not subscribing to this assessment.

Now, our delegates are unanimous on that opinion, and as you well know, I have stated that publicly. It is the opinion of the officers of the Society that that is the story and there is nothing in the by-laws of the Society that makes it possible to punish anybody for not paying an American Medical Association assessment. Therefore, it seems logical to believe that it is voluntary and I am certain that the Society and the American Medical Association do not want your money or anybody else's money if it is not given voluntarily.

I am trying, as you can see, to answer any of the questions that have been raised concerning the issue over the last two months.

Having decided that that was the whole story, I still was not willing to act as an agent of the American Medical Association without some degree of authority from the Society and I did not think it was wise to wait for a Council meeting. I made the proposal to the Executive Committee that they authorize me to act as an agent for the American Medical Association in the collection of this money, and they did so unanimously, after first voting that this was an emergency; under the by-laws the Executive Committee has the right to authorize any officer of the Society to act in an emergency. So the Executive Committee acted within their rights, and after careful discussion, which lasted a considerable time, they voted unanimously to do what the American Medical Association requested me to do.

I was asked yesterday by one of our officers to summarize what has happened since. I might say first that the bill that you received and the method of producing it were decided upon by a meeting of our delegates and the officers of the Society, and they all agreed that the method of sending the bill, the printed material that you saw on it, was all right. That vote was unanimous.

I had to anticipate a certain amount of criticism, perhaps, to the effect that the Society's office help and the salaried officials ought not to spend too much time or money or effort in the collection of this money. They are being paid to work for the Massachusetts Medical Society and not for the American Medical Association. That is a question, and I anticipated that criticism possibly by seeing to it that none of this work has been done by the officers or the salaried or wage-earning help of the Society.

The printing was done outside, and the American Medical Association paid the bill.

The mailing was done by a professional mailing concern, at the expense of the American Medical Association. And the checks, as they come back, are accounted for by an extra clerk, whose salary will be paid by the American Medical Association. So that all we have done is think about it and plan the routine of doing it. No real work has been subtracted from the time that we are supposed to be spending for the Massachusetts Medical Society.

The Secretary then moved that the Council ratify the action of the Executive Committee in this matter. The motion was seconded.

Dr. Lawrence R. Dame (Franklin) emphasized the points brought out by the Secretary and reviewed the point of view of the Executive Committee.

Dr. John J. Curley (Worcester North) stressed the fact that the American Medical Association had no available funds for an educational campaign and gave the point of view of the delegates that this was an emergency.

The President stated the question and suggested a vote by ballot. Dr. Scarcello (Worcester) moved that the vote be taken by voice. The motion was seconded, and it was so voted. The President then put the question of ratification to a vote, and it was carried unanimously.

Committee on Public Relations — Dr. Harold R. Kurth, Essex North, *Secretary*.

Dr. Kurth presented the report (Appendix No. 4) and moved its acceptance. The motion was seconded, and it was so voted.

Dr. Kurth then stated there were two items in the report that required action by the Council. The first was the request of Dr. Conlin to attend all committee meetings to gather information he might desire for the proper functioning of his office. As a result of discussion in the Executive Committee, Dr. Kurth presented for approval the resolution appearing in the Executive Committee report as follows:

That the Director of Medical Education and Information shall be a non-voting member of all committees of the Massachusetts Medical Society. He shall be privileged to distribute the information acquired at such meetings after written approval of the Committee or its chairman, and further, if this action is approved, that it be referred to the Committee on By-laws and Council Rules for their action.

Dr. Ralph R. Stratton (Middlesex East) made a motion to amend the resolution by inserting after the word "Committees," the words "with the exception of the Committee on Ethics and Discipline." This amendment to the resolution was seconded, and after some discussion it was so voted. The President then stated the resolution as amended, and it was so voted.

Dr. Kurth then stated the second matter for consideration — namely, the code concerning matters of publicity so far as they concerned physicians and hospitals.

This code was submitted to the committee by Dr. Conlin as it came from the Executive Committee of the Massachusetts Eye and Ear Infirmary. The Committee on Public Relations accepted the code as revised by the Committee on Ethics and Discipline, to which it had been referred. The Executive Committee believed that it should be resubmitted to the Committee on Ethics and Discipline for further consideration. Dr. Kurth made a motion to resubmit the code. The motion was seconded.

Dr. McCarthy (Norfolk) said he believed that the Society should have some control over certain publicity by hospitals. Dr. Kurth stated that he believed that the Society could have no such control. The President stated the motion, and it was approved unanimously.

Dr. Kurth moved for acceptance of the report as a whole, and it was so voted.

Committee on Legislation — Dr. Solomon L. Skvirsky (Norfolk), *Chairman*.

Dr. David L. Belding (Norfolk South) presented the report (Appendix No. 5) in the absence of the chairman. Dr. Belding made a motion that the Council approve the recommendation of the committee that the President annually appoint a subcommittee on national legislation, that all reports and actions of the subcommittee be cleared through the Committee on Legislation and that the President make such additional emergency and temporary appointments for handling national legislation as, in his opinion, the situation demands. The motion was seconded, and it was so voted.

Dr. Belding then made a motion that the President appoint a committee of five to meet with the Massachusetts Nurses Association. The motion was seconded, and it was so voted. Dr. Belding moved acceptance of the report as a whole. The motion was seconded, and it was so voted.

Committee on Arrangements — Dr. Harold G. Giddings (Middlesex South), *Chairman*.

Dr. Giddings presented the report (Appendix No. 6) as informational and moved its acceptance. The motion was seconded, and it was so voted.

Committee on Finance — Dr. Robert W. Buck (Middlesex South), *Chairman.*

Dr. Buck presented the report as printed (Appendix No. 7) and moved the adoption of the first recommendation as follows:

> An increase of $1500 in the salary of the Director of Medical Information and Education above that provided in your action last year by which annual increases were to amount to $500 each year until a total salary of $10,000 was reached. It is the opinion of the officers of the Society, the members of the original committee that chose the Director and of other representative fellows that the full salary should be paid beginning in 1949 instead of in 1952.

The motion was seconded, and it was so voted.

Dr. Buck moved the adoption of the second recommendation as follows:

> I move an increase of $1200 in the salary of the Executive Secretary, which has been requested by officers of the Society, and approved by your committee and also approved by the Executive Committee.

The motion was seconded, and it was so voted.

Dr. Buck then moved that the salary of the Assistant Treasurer be fixed at $500 (no salary had been paid previously). The motion was seconded, and it was so voted.

Dr. Buck then moved that the Director of Medical Information and Education be provided with secretarial service at an annual cost of $2,000. The motion was seconded, and it was so voted.

Dr. Buck then moved "that the increase in the budget for the Committee on Legislation be adopted, with the explanation that this increase will largely be demanded because of increased secretarial duties that will be required." The motion was seconded, and it was so voted.

Dr. Buck then spoke as follows:

> I only wish to call attention to the last paragraph and perhaps emphasize it. We have found no difficulty in using up the additional funds that have been supplied by the increase in dues. There have been so many requests and apparent real needs for the use of these funds that it becomes a little too easy to spend money. We must now realize that we have reached almost the limit of our possible expansion and that it is now up to the chairmen of all committees and to all of us to realize that we are working within our budget, but not with any great margin to spare and nobody wants to see another increase in dues or have to raise money from some other source.

Dr. Buck then made the motion to accept the report as a whole. The motion was seconded, and it was so voted.

Committee on Industrial Health — Dr. Daniel L. Lynch (Norfolk), *Chairman.*

Dr. Lynch presented the report (Appendix No. 8) as informational and moved its acceptance. The motion was seconded, and it was so voted.

Advisory Subcommittee on Malpractice Insurance — Dr. Carl Bearse (Norfolk), *Chairman.*

Dr. Bearse submitted his report (Appendix No. 9) with one correction — that is, 155 suits pending instead of 147. He added that during 1947 there were 64 new suits entered in courts. Dr. Bearse stated that his committee had sent questionnaires to 5530 doctors; letters were sent to 49 secretaries of medical organizations and to all companies writing malpractice insurance in Massachusetts.

Dr. Bearse made the motion that the Council approve the recommendation concerning "listeners." The motion was seconded. Dr. John Curley stated the arguments against the motion as discussed in the Executive Committee. Dr. McCarthy (Norfolk) spoke in favor of the motion. Dr. Dame (Franklin) spoke against the motion. Dr. Allan M. Butler (Suffolk) pointed out that either the doctor or the insurance company could employ "listeners" if they wished.

The President stated the motion, and it was not carried by voice vote.

Dr. Bearse then made a motion to approve the second recommendation concerning a panel of experts. The motion was seconded. There was no discussion. On voice vote the motion was defeated.

Dr. Bearse then made a motion that the Council approve the third recommendation that his committee review the testimony of members and that if the testimony were found substandard, the matter would be reported to the Committee on Ethics and Discipline. The motion was duly seconded, and it was so voted.

Dr. Bearse then moved that the Council approve the fourth recommendation that the insurance companies be notified of the actions of the Council in these matters. The motion was seconded.

Dr. Kickham (Norfolk) said he believed there was no necessity for the Council to report its actions to any insurance company. On a show of hands the motion was lost.

Dr. Bearse then moved for acceptance of the report as a whole. This motion was seconded, and it was so voted.

The Secretary called the attention of the Council to the recommendation of the Executive Committee praising the committee for the good job it had done and hoping that it would continue to act. The Secretary moved the approval of this recommendation by the Council. The motion was seconded, and it was so voted.

Committee on Emergency Medical Service — Dr. Reginald Fitz (Suffolk), *Chairman.*

In the absence of the Chairman, the Secretary submitted the report (Appendix No. 10) and stated the arguments of the Executive Committee against the recommendations of the committee concerning the make-up of the committee as proposed. The Secretary made the motion that the recommendation of the Committee on Emergency Medical Service be disapproved by the Council. This motion was seconded.

Dr. Scarcello (Worcester) stated that he believed the committee should be a representative committee like the committees on Public Relations and Legislation.

Dr. Curley (Worcester North) said he believed that a group near Boston would be most effective and that if the chairman of the district committees were added to the present committee, the resulting enlarged committee would be democratic. On a show of hands, the motion to disapprove was carried.

The Secretary made a motion to approve the recommendation of the Executive Committee, which would add the chairmen of the district committees to the present committee. The motion was duly seconded, and it was so voted. The Secretary moved for acceptance of the report as a whole. The motion was seconded, and it was so voted.

Committee to Meet with the Officers of the Bay State Rehabilitation Clinic — Dr. Charles H. Bradford (Suffolk), *Chairman.*

Dr. Bradford made the motion to approve the report (Appendix No. 11) as a whole, with its four recommendations. The motion was seconded, and it was so voted.

The President stated that he was reappointing the same committee as the now working committee and adding to it Dr. Alexander P. Aitken. He asked for approval of this action. The motion was seconded, and it was so voted.

Advisory Subcommittee on Medical Education — Dr. I. R. Jankelson (Norfolk), *Chairman.*

Dr. Jankelson made a motion to accept the report (Appendix No. 12) as informational. The motion was seconded, and it was so voted.

Committee on Diabetes — Dr. Howard F. Root (Suffolk), *Chairman.*

Dr. Root presented the first part of the report, as printed in the Circular of Advance Information (Appendix No. 13), as informational and moved its acceptance. The motion was seconded, and it was so voted. Dr. Root then moved for the approval of the resolution in the supplementary report (Appendix No. 14). The motion was seconded, and it was so voted. Dr. Root then moved acceptance of the report as a whole. The motion was seconded, and it was so voted.

Committee on Blue Cross-Blue Shield Problems — Dr. Charles J. E. Kickham (Norfolk), *Chairman.*

Dr Kickham presented the report (Appendix No. 15) as printed. He moved that the first recommendations to have the President appoint annually a general chairman of the Blue Shield Fee Committee Chairmen be approved by the Council. The motion was seconded, and it was so voted. Dr. Kickham then moved that the second recommendation, "that the Executive Director of Blue Shield annually request the Specialty Sections within the Society and the Specialty Sections without the Society to review the composition of their respective Blue Shield Fee Committees and that the Executive Director of Blue Shield suggests to the Specialty Sections a uniform method of rotating membership on Blue Shield Fee Committees," be approved by the Council. The motion was seconded, and it was so voted. Dr. Kickham then moved acceptance of the report as a whole. The motion was seconded, and it was so voted.

Committee on By-laws and Council Rules — Dr. Edward P. Bagg (Hampden), *Chairman.*

Dr. Bagg presented the report of the committee (Appendix No. 16) as corrected. Dr. Bagg made a motion to accept the report as a whole. The motion was seconded, and it was so voted. Dr. Bagg then made a motion for the approval by the Council of each of the resolutions in the report. The motions were each seconded, and it was so voted.

Dr. Bagg made a motion for approval by the Council of the changes in the Council rules as printed. The motion was seconded, and it was so voted.

Dr. Bagg then made a motion for the approval of the preamble to the Rules. The motion was seconded, and it was so voted. Dr. Bagg then moved for approval of the report as a whole. The motion was seconded, and it was so voted.

Advisory Committee to the Woman's Auxiliary — Dr. John F. Conlin (Suffolk), *Chairman.*

Dr. Conlin submitted the report (Appendix No. 17) as informational and moved its acceptance. The motion was seconded, and it was so voted.

Dr. Conlin then made the following statement:

> An additional progress report concerning the Woman's Auxiliary points to 16 of the 18 district medical societies that have now approved the formation of auxiliaries. Eleven of the auxiliaries are now formed, and 2 more are in process of formation.
>
> It is fondly hoped that this portion of our activities will be an accomplished fact by the time of the annual meeting.
>
> I respectfully request officers of the district medical societies, and in particular district advisory committees, to take a strong interest, particularly at this time, in the matter of the auxiliaries, and to render them every possible assistance in the formation and extension of membership and in their various programming and other activities.
>
> I point out that in some instances there are minor difficulties, and I ask that the advisory committees be alert, and remember that they have a veto power, upon actions of the auxiliaries that bear upon major matters in the field of, particularly, public relations and legislation.
>
> Consequently, any major project of theirs must be approved by the local advisory committees. It is a matter of extreme importance that that be closely observed, not that malicious mistakes be made, but that mistakes due to lack of knowledge do not occur.
>
> As with any new project, there are a few minor difficulties. There is the question of proper representation of various towns throughout a district. Occasionally, there is some suggestion of factionalism and minor matters of that type, but I see no major difficulty.
>
> I conclude my report with the observation that not only is the Auxiliary doing everything that we fondly hoped

it would do but also the Auxiliary as a whole, as now constituted, is doing an excellent job and we expect a tremendous amount from it in the immediate future.

Report of the Meeting of the House of Delegates of the American Medical Association — Dr. Walter G. Phippen (Essex South).

Dr. Phippen made the following statement:

This report is merely informational. You will find it on the last two and a half pages of the Circular of Advance Information (pages 30, 31 and 32). If there is any question anyone wishes to ask, I should be very glad to answer it.

I should like to say that your delegates to the House of Delegates would be very glad to receive any information or any criticism that you have, or to be instructed in any way you would like to have them vote. Remember, always, that they are your servants and try to act exactly as you would like to have them act.

The House of Delegates is a serious body. It consists of 175 members elected by the different constituent state societies, in addition to 1 member from each section of scientific assembly, and 1 member each from the Army, Navy and Public Health Service. The meetings are extremely well attended. The work is all conducted in a business-like way. The resolutions are presented to the House and are then handed to reference committees. These reference committees are chosen before the House sits, so that the men know on which committee they are going to serve.

At the appointed time these reference committees hold hearings at which anyone is invited to come and talk — not necessarily members of the House of Delegates, not necessarily entirely members of the American Medical Association, but anyone may come to a meeting of a reference committee and express his views.

After the reference committees have heard all the evidence they sit sometimes for long hours, sometimes well after midnight, discussing the questions that they have before them, and drawing up a report.

This report is then presented to the full House of Delegates and is open for debate, which is often lively and spirited.

I can assure you that, contrary to the belief of some people, the House of Delegates is really a representative body. You meet there people from all over the country. You may sit beside a man from Texas at breakfast and a man from Oregon at lunch, and you learn the very diversified opinions that are prevailing all over the country.

Your delegates propose to hold a meeting some weeks before the meetings of the House of Delegates so that they may discuss the problems that are of interest to you.

Dr. Phippen then made a motion to accept the report. The motion was seconded, and it was so voted.

The Secretary then made a motion to accept the report of the Executive Committee as amended. The motion was seconded, and it was so voted. The Secretary then moved to recess until 2:00 p.m. The motion was seconded, and it was so voted.

After the Cotting Luncheon, the Council was called to order by the President at 2:00 p.m.

The Secretary stated that under unfinished business was the report of the Committee on Tax-Supported Medical Care, which had been laid on the table at the meeting of October 6, 1948.

Dr. A. J. A. Campbell (Suffolk) made a motion that this report be taken off the table. The motion was seconded, and it was so voted.

Dr. Albert A. Hornor (Suffolk) stated that the question of tax-supported medical care was still confused and that his committee needed more data. He made the motion that the matter be referred back to the committee for a report at the annual meeting. The motion was seconded, and it was so voted.

The Secretary stated that under unfinished business was the matter of voluntary registration of cancer, recommended by the Committee on Cancer, which had been laid on the table at the October 6, 1948, meeting. The Secretary moved that the following motion be taken off the table:

It is therefore recommended by the Committee on Cancer that the Massachusetts Medical Society endorse the principle of voluntary registration of cancer cases, and that the Committee on Cancer be instructed to develop a system for consideration by the Council.

The motion was seconded, and it was so voted.

Dr. Thomas J. Anglem (Suffolk) made a motion to approve the above recommendation for the following reasons:

The nature of the disease is such that everyone accepts the fact that long-term study and statistical analysis of large groups of cases is essential, and we believe that the centralization of registration in some one area or place would definitely facilitate this type of study. At present, the cases are buried in the files of various hospitals, and anyone attempting to do a large-scale study is working against difficult odds.

Moreover, we believe that this type of registration would uncover and identify cases that are now being lost. The large number of cases that are seen by the family doctor in advanced or moderately advanced stages of the disease that are not now registered anywhere would be uncovered by this type of registration. And we also believe that anything that focuses further attention on the disease has educational value.

The motion was seconded.

Dr. Charles C. Lund and Dr. Vlado A. Getting spoke in favor of the motion. Dr. Getting offered the following amendment to the motion: "That the first portion of endorsing voluntary registration be omitted and that the motion read that the 'Committee on Cancer of the Massachusetts Medical Society be authorized to make a study and present a plan to the Council for voluntary registration of Cancer.' "

The motion was seconded, and it was so voted. The President then called for a vote on the motion as amended. It was so voted.

Dr. Anglem moved the acceptance of the report as amended. The motion was seconded, and it was so voted.

The Secretary said that under new business Dr. Root had sent a letter to the President recommending that the matter of diabetes detection among industrial groups be studied. The Secretary moved that this matter be referred to the Committee on Diabetes. The motion was seconded, and it was so voted.

The Secretary stated that he had received a letter from the Massachusetts Society of Clinical Psychologists concerning the problem of registering clinical psychologists as assistants in the practice of psychiatry. The Secretary moved that this matter be re-

ferred to the Committee on Public Health. The motion was seconded, and it was so voted.

Dr. B. E. Barton (Norfolk) said that to further the Gallupe Plan and other purposes it is desirable to have every eligible practitioner enrolled in the Society. He said that at a pre-Council meeting of the councilors of the Norfolk District Society, the following resolution was passed: "That the Massachusetts Medical Society be informed that the Norfolk District favors placing before the Council for its consideration the matter of contacting eligible nonmembers of the Society to see if they would be interested in becoming members." Dr. Barton moved acceptance of the resolution. The motion was seconded, and it was so voted.

The President recognized Dr. Earle M. Chapman (Suffolk), who made the following remarks:

> I come before the Council as a representative of a group of earnest younger men in medicine who have met and discussed these problems that we are faced with and they have asked me to present these as their expression of their ideas on the current problems, so I should like to bring this up for consideration.
>
> First, we believe that the health of the people served by prepayment insurance plans will be most benefited by medical care free of Government administration and control.
>
> Secondly, we should like to call attention to the profligate waste and duplication in health programs operated by the Government in both hospital beds and personnel, as reported by the Hoover Commission. We believe that compulsory health insurance operated by the Government would result in similar inefficiencies.
>
> Thirdly, the manner of expression of policy on the part of the American Medical Association has served to diminish public confidence in that body, to the serious concern of many of the members of the Association.
>
> Therefore, we suggest as constructive proposals, worthy of support, the following:
>
> First, unqualified endorsement of the principles for distribution of medical care agreed upon by the National Health Assembly in Washington, D. C., in May of 1948. And specifically within that body of principles, we endorse the action of the Massachusetts Medical Society in promoting, one, the rapid expansion of voluntary medical care prepayment plans to provide more comprehensive enrollment. We appreciate that it will be necessary to use tax funds to extend such services to income groups financially unable to secure such benefits.
>
> And secondly that benefits under these prepayment plans be expanded to provide more comprehensive coverage for illness. Implicit in this expansion should be the principle of the assumption of a portion of the initial cost of any one illness by the subscriber.
>
> We further urge that our delegates to the American Medical Association be instructed to press for the general adoption of the above principles and proposals by the American Medical Association.

Dr. Leland S. McKittrick (Suffolk) was recognized and spoke as follows:

> Dr. Chapman was good enough to give me a copy of these suggestions and I have been thinking them over. I should like to say at the outset that I am not only sympathetic with but also enthusiastic for the thinking and the initiative that is behind these suggestions.
>
> I am perfectly sure that, without a great deal of thought and a great deal of discussion, there are certain things in the suggestions that we would find it difficult to approve. I could not possibly approve, for example, of unqualified endorsement of the principles for the distribution of medical care agreed upon by the National Health Assembly in Washington. There are certain things that I would want to go over very carefully. But I think that the thinking behind this might well represent something that we could give careful thought to, and the suggestion I have is this.
>
> I wonder -- and I am not going to make it in the form of a motion because I do not know whether it is a proper thing to do or not, whether it would be agreeable to Dr. Chapman and whether the Council would like it — but the suggestion is that this be referred to the Committee on Economics, with the request that it be given careful thought, and that they bring back and send to the Council some concrete suggestions in keeping with the thinking behind this communication.
>
> In other words, it is about time that the Committee on Economics got to work again. I think, as a matter of fact, that we have some principles that the Council has agreed upon, which are far better than the National Assembly endorsement that is asked for here. It is possible that the Council and the Society have already proved that concrete suggestions might be brought back that the delegates could take to Atlantic City with them.
>
> At any rate, I think it is worth a good deal of careful consideration and probably several long, hard meetings to try to come up with something. And that would be my suggestion as a possible mechanism of handling this communication.

Dr. McKittrick moved that this be referred to the Committee on Medical Economics. The motion was seconded.

Dr. Faxon and Dr. Bagnall endorsed the substance of Dr. Chapman's proposals. Dr. Bagnall said he would like to have the group discussing this matter enlarged to include the Society's delegates and Dr. Chapman's group. Dr. Norman A. Welch suggested that the matter might be one of public relations rather than economics. Dr. Curley moved the following amendment to the motion: "That the matter be referred to a joint meeting of the Committees on Medical Economics and Public Relations." The motion was seconded, and it was so voted. The President called for a vote on the motion as amended. It was so voted. Dr. Bagnall said that all interested parties would be invited and set the time of the meeting as Wednesday, February 9, 1949.

A motion to adjourn was made and seconded, and it was so voted at 3:00 p.m.

H. Quimby Gallupe, *Secretary*

APPENDIX NO. 1

Attendance of Councilors

Berkshire
Modestino Criscitiello
P. J. Sullivan

Bristol North
J. V. Chatigny
W. E. Dawson
J. L. Murphy
W. M. Stobbs

Bristol South
J. C. Corrigan
D. F. Gallery
R. H. Goodwin
William Mason
C. C. Tripp

Essex North
M. F. Ames
E. S. Bagnall
R. E. Blais
J. A. Bradley
N. F. DeCesare
A. P. George
H. R. Kurth
R. C. Norris
L. C. Peirce
F. W. Snow
C. T. Stokes
F. N. Sweetsir
C. A. Weiss

Essex South
S. N. Gardner
Loring Grimes
C. A. Herrick
P. P. Johnson
R. T. Moulton
A. E. Parkhurst
W. G. Phippen

E. D. Reynolds
H. D. Stebbins
P. E. Tivnan
C. F. Twomey

FRANKLIN
L. R. Dame
J. E. Moran

HAMPDEN
E. P. Bagg
R. L. Barrett
G. B. Corcoran
A. J. Douglas
E. C. Dubois
Adolph Franz, Jr.
J. M. Gilchrist
Frederic Hagler
A. G. Rice
G. L. Schadt
J. A. Seaman
G. L. Steele

MIDDLESEX EAST
J. L. Anderson
T. P. Devlin
Robert Dutton
E. M. Halligan
R. W. Layton
K. L. Maclachlan
H. L. Mueller
M. J. Quinn
R. R. Stratton
J. M. Wilcox

MIDDLESEX NORTH
R. E. Cole
W. E. Collins
S. A. Dibbins
L. J. Hall
J. Y. Rodger
A. J. Stewart
J. D. Sweeney

MIDDLESEX SOUTH
E. W. Barron
Harris Bass
J. M. Baty
J. D. Bennett
W. O. Blanchard
H. K. Bloom
G. F. H. Bowers
Madelaine R. Brown
R. N. Brown
R. W. Buck
J. F. Casey
C. W. Clark
E. A. Cooney
W. H. Crosby
J. A. Daley
C. L. Derick
J. G. Downing
A. G. Engelbach
W. C. Feeley
J. M. Flynn
H. Q. Gallupe
V. A. Getting
H. G. Giddings
H. A. Godfrey
A. D. Guthrie
Eliot Hubbard, Jr.
A. M. Jackson
F. R. Jouett
H. A. Kontoff
A. A. Levi
A. N. Makechnie
J. H. McSweeney
J. C. Merriam
Dudley Merrill
C. E. Mongan
Fabyan Packard
L. S. Pilcher
G. A. Saunders
E. W. Small
H. P. Stevens
K. J. Tillotson
A. B. Toppan
J. B. Townsend
J. E. Vance
C. F. Walcott
R. H. Wells
Hovhannes Zovickian

NORFOLK
C. M. Allard
B. E. Barton
Carl Bearse
Elizabeth Broyles
G. L. Doherty
Albert Ehrenfried
J. M. Faulkner
P. S. Foisie
Susannah Friedman
T. R. Goethals
H. B. Harris
C. G. Hayden
R. J. Heffernan
P. J. Jakmauh
I. R. Jankelson
L. F. Johnson
C. J. Kickham
C. J. E. Kickham
D. L. Lionberger
D. S. Luce
C. M. Lydon
D. L. Lynch
F. P. McCarthy
F. J. Moran
H. R. Morrison
Hyman Morrison
D. J. Mullane
H. A. Novack
W. R. Ohler
E. E. O'Neil
R. S. Palmer
G. W. Papen
H. C. Petterson
H. A. Rice
D. D. Scannell
J. A. Seth
L. A. Sieracki
S. L. Skvirsky
E. C. Smith
Kathleyne S. Snow
J. W. Spellman
A. R. Stagg
N. A. Welch
G. F. Wilkins
P. R. Withington
Marjorie Woodman

NORFOLK SOUTH
D. L. Belding
Harry Braverman
W. R. Helfrich
Frederick Hinchliffe
E. K. Jenkins
N. R. Pillsbury
D. B. Reardon
H. A. Robinson

PLYMOUTH
J. C. Angley
G. A. Buckley
A. L. Duncombe
Samuel Gale
H. H. Hamilton
G. A. Moore

SUFFOLK
H. L. Albright
A. W. Allen
T. J. Anglem
M. D. Altschule
C. H. Bradford
W. J. Brickley
W. E. Browne
A. M. Butler
A. J. A. Campbell
E. M. Chapman
M. H. Clifford
A. P. DerHagopian
N. W. Faxon
Maurice Fremont-Smith
Joseph Garland
G. L. Gately
A. A. Hornor
C. S. Keefer
H. A. Kelly
T. H. Lanman
C. C. Lund
C. F. Maraldi
H. L. Musgrave
J. P. O'Hare
L. E. Parkins
L. E. Phaneuf
Helen S. Pittman
J. H. Pratt
J. J. Regan
W. H. Robey
Horatio Rogers
H. F. Root
C. G. Shedd
R. M. Smith
Augustus Thorndike
Conrad Wesselhoeft

WORCESTER
A. W. Atwood
George Ballantyne
F. T. Bousquet
Jacob Brem
J. B. Butts
J. T. B. Carmody
F. B. Carr
E. J. Crane
Paul Dufault
J. J. Dumphy
W. J. Elliott
John Fallon
Donald Hight
Thomas Hunter
J. A. Lundy
D. K. McClusky
F. A. O'Toole
G. L. Richmond
N. S. Scarcello
J. J. Tegelberg
R. J. Ward
B. C. Wheeler

WORCESTER NORTH
J. J. Curley
J. V. McHugh
C. S. McPeak
J. G. Simmons

APPENDIX NO. 2

REPORT OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was called to order at 1:00 p.m. on January 5, 1949, by the president, Dr. Daniel B. Reardon. The meeting followed a luncheon at the Harvard Club. All the officers of the Society were present. The councilors of Barnstable, Berkshire and Hampshire were absent.

The Secretary explained that the time of the meeting had been changed to allow for full discussion of all questions, that the Council might have the advantage of the discussions and with the hope that, as a result, the Council meetings might be shortened and improved. There were no matters referred to the Committee by the Council.

COMMITTEE REPORTS

Committee on Membership

The Committee met on December 8, 1948, and the Secretary submitted the report, which concerned requests for resignation with remission of dues; deprivation of membership for nonpayment of dues; deprivation of membership for nonpayment of district-society dues; and deprivation of membership for nonpayment and whereabouts unknown. This part of the report was accepted by the Executive Committee.

The discussion of additional categories of membership appears in Appendix No. 3.

The Secretary was assured that the Executive Committee members had considered this matter as presented by the Committee on Membership very carefully. On motion duly made and seconded, the recommendation was unanimously approved.

NEW BUSINESS

The Secretary read a telegram from Dr. George F. Lull, secretary of the American Medical Association, received after the St. Louis Interim Session: "Recent Interim Session House of Delegates unanimously decided to assess each member of American Medical Association $25.00. You are requested to collect this assessment through your county units or any other way you desire. Bill association for any extra expense in connection with the collection."

The Secretary pointed out that this assessment was permissible under the new by-laws of the American Medical Association; that the purposes of the fund were explained in an editorial in the *Journal of the American Medical Asso-*

ciation, issue of December 11, 1948, and that the fund was needed as soon as it could be collected. Dr. John J. Curley, a delegate, stated that it was a real emergency because the American Medical Association had no funds and that this was the first assessment ever made.

The Secretary then asked the committee to grant him permission to collect the assessment as an agent of the American Medical Association. Upon request, the Secretary quoted the following from the by-laws of the Society: "The Executive Committee shall authorize or confirm action by the officers in emergency."

Dr. Arthur W. Allen stated that if the committee agreed this to be an emergency, the Secretary could be authorized to act. Dr. Donald Munro then moved that the committee declare that an emergency existed in relation to the collection of the assessment for the American Medical Association. The motion was seconded and unanimously carried.

Dr. Munro then moved that the Executive Committee authorize the secretary of the Massachusetts Medical Society to act as an agent of the American Medical Association in the collection of the assessment. The motion was seconded by Dr. Curley and unanimously voted.

Reports of Committees in Circular of Advance Information

Committee on Public Relations

The President called the attention of the committee to page 1, lines 22 to 25, of the report and said that he would leave it to the committee whether or not that should be acted upon. Dr. Munro said the paragraph should be clarified. The Secretary said he had made the suggestion to the Public Relations Committee that they recommend that Dr. Conlin be permitted to attend all meetings of all committees, that he might function better in his public-relations efforts. Dr. Munro admitted the permission was justified, but doubted the propriety of a blanket permission to distribute information whenever Dr. Conlin deemed necessary. Dr. Allen suggested that Dr. Munro rewrite the paragraph. Dr. Maclachlan said he thought Dr. Conlin ought to have the same privilege as the Secretary and the Treasurer — in other words, to attend meetings but without a vote.

Dr. Conlin said he believed such permission would enhance the effectiveness of his position. Dr. John Fallon said he believed the Society had employed Dr. Conlin to acquire and dispense information according to his best judgment. Dr. Reginald Fitz offered the suggestion that this recommendation might necessitate a change in the by-laws.

Dr. Munro moved that paragraph 3 of the report on page 1 should be amended as follows: "It was the unanimous opinion of the committee that the Director of Medical Education and Information shall be a nonvoting member of all committees of the Massachusetts Medical Society. He shall be privileged to distribute the information acquired at such meetings after written approval of the committee or its chairman; and further, it is the opinion of the Executive Committee that this action, if approved, be referred to the Committee on By-laws and Council Rules." The motion was seconded, and it was so voted.

The President then asked for a discussion of the paragraph beginning on line 45 of page 2 of the report. Dr. Maclachlan said that he liked the code but thought it might not coincide with the code of the American Medical Association. Dr. Conlin stated that the code was a forward-looking step in hospital-staff publicity problems. The press demanded to know Who, What and When. Dr. Stratton's committee was satisfied with the code as it stood. Dr. Curley, Dr. Munro and Dr. Norman A. Welch said that they had heard criticisms of the press release in *The Boston Herald* from the Massachusetts General Hospital of ten days ago. Dr. Charles J. E. Kickham agreed. Dr. Joseph L. Murphy said that he believed the code was a proper step. Dr. Curley moved that the code be referred back to the Committee on Ethics and Discipline for their further consideration and referred back to the Executive Committee. The motion was seconded, and it was so voted unanimously.

Committee on Legislation

The President drew the attention of the Executive Committee to lines 24 to 26 on page 4 of the report: "It was voted that the President of the Society appoint annually a Committee on National Legislation after consultation with the Committee on Legislation." Drs. Fallon, Munro and Curley considered this rather confusing, and Dr. Belding said he believed the Committee on Legislation felt that it would be best to have a definite subcommittee so that work could be carried out harmoniously between the two, and that the President should have the power to appoint special men for special jobs at any time.

Dr. Reginald Fitz suggested that the insertion of "sub-" before the word "committee" in line 25, page 4, would clarify the matter.

It was then voted to amend the report by the insertion of the prefix "sub-" before "committee" in line 25, page 4 of the report.

The Secretary then stated that he had asked the Committee on Legislation to make the recommendation beginning on line 32, page 4, so that the Society would have a method of co-operating with the Nurses Association in the writing of any proposed changes in the nurse-practice act. On motion duly made and seconded, the recommendation was unanimously approved.

Committee on Arrangements

This informational report was accepted.

Committee on Finance

Dr. Buck presented the budget as printed and said that although some recommendations might be questioned, he believed all the increases could be justified.

Dr. Lawrence R. Dame wanted to know if there had been an increase in the use of the Library. Drs. Fallon and Curley thought that there was an increase, but did not know to what extent. Dr. Buck suggested that the Library might well make an annual report to the Society concerning the activities and accomplishments. Dr. Curley, a trustee, said that he would bring that recommendation before them.

Dr. Buck then brought up the recommendation beginning on line 37, page 6. The Secretary said that he had made that recommendation to the Committee on Finance after consultation with, and agreement from, Drs. O'Hara and Bagg, who had made the salary arrangements originally. The Secretary pointed out the value of Dr. Conlin's work and the danger to the Society if he was lost. Dr. Reardon agreed. Dr. Curley moved that the recommendation be approved. The motion was seconded, and it was so voted.

The Secretary stated that he had made the second recommendation to the Committee because of the value of Mr. Boyd's work, and the inadequacy of his present salary because of the increased cost of living, and because Mr. Boyd had three dependents. Dr. Curley moved approval of the recommendation. The motion was seconded, and it was so voted.

Dr. William M. Collins moved that recommendation 3, line 47, page 6, be approved. The motion was seconded. Dr. Reardon said that the Assistant Treasurer had not had a salary and that it was justified because of the increase in the work of tax returns, which he handled. The motion was carried unanimously.

Dr. Lawrence Dame moved the approval of the fourth recommendation on line 50, page 6. The motion was seconded. The Secretary and Dr. Conlin stated that a secretary to assist Dr. Conlin was essential. He now had the part-time use of one of the three in the office. Dr. Conlin stated that he believed this small investment would get a great deal more work out of the Director of Medical Education and Information. The motion was put to a vote and carried unanimously.

Dr. Buck then called attention to recommendation 5, line 1, page 7, and said that it was confusing and was not a recommendation for a full-time secretary, but indicated an increase of $2000 over what the committee spent in 1948 and was $1500 more than the $5000 budget for the year 1948. He said the increase was needed for all sorts of work of the committee, a good deal of which was secretarial in nature.

Dr. Reardon then ruled that no action was necessary on this in particular and would be covered by approval of the budget as a whole. Dr. Curley moved approval of the report as a whole. The motion was seconded, and it was so voted.

Committee on Industrial Health

The Executive Committee accepted the report as informational.

Advisory Committee on Malpractice Insurance

Dr. Reardon introduced Dr. Carl Bearse, who presented the report of his committee as printed. Dr. Curley asked if

the Council had not already voted against the use of "listeners." The Secretary pointed out that the Executive Committee had opposed the use of "listeners," and that the Council had upheld the objection. Dr. Maclachlan said that there was not a large enough majority of insurance companies wanting the service to justify it.

Dr. Dame said that until a need was definitely made plain, he disapproved the use of listeners. Dr. George A. Moore said that he believed it a good idea and that it would have a salutary effect on many men who feel they say things in court with no objection being raised.

Dr. Maclachlan moved that the first recommendation be disapproved. The report was seconded, and it was so voted.

Dr. Curley said that the Executive Committee had previously refused to compile a list of experts for governmental agencies, and that it might not do so for insurance companies. Dr. Welch said that the recommendation suggested that whoever submits himself as an expert is *ipso facto* accepted as such. Dr. Curley moved that the second recommendation be disapproved. The motion was seconded, and it was so voted. Dr. Curley then moved approval of the third recommendation. The motion was seconded. Dr. Munro asked if this would not make the committee act over the head of the Committee on Ethics and Discipline. Dr. Curley suggested that insurance companies might report to this committee when they would not report to the Committee on Ethics and Discipline. On a show of hands, at the request of the President, the third recommendation was approved 8 to 5. The fourth recommendation was approved without discussion.

Dr. Arthur W. Allen and Dr. Dame then praised the committee for the good job it had done and hoped it would continue to keep in action. Dr. Maclachlan then moved that since the committee had done an outstanding piece of work, it should continue for further reports of progress. The motion was seconded, and it was so voted.

Committee on Emergency Medical Service

Dr. Fitz submitted the report as printed and stated that the committee had "leaned over backward" to present the Worcester plan as fairly as possible to the Executive Committee and the Council. The committee agreed that it should be as representative as possible, and chosen on as broad a base as possible. The Secretary said that usually a committee for a special project was better if small and appointed by the President after careful selection, and that this committee was just that. Dr. Allen thought that if the recommendation was approved the new committee might select an executive committee to carry the burden. Dr. Curley moved that the recommendation be disapproved. The motion was seconded.

The Secretary said that the committee now in existence and the present plan were formed at the suggestion of the Council on Emergency Medical Service of the American Medical Association and had the approval of the Council, and said that the committee would have to confer with the Governor's committee and might best be near Boston. Dr. Harvey A. Kelly suggested that a man from each district might be added to the present committee. The President put the question, and the motion was carried.

Dr. Curley then moved that the chairmen of the eighteen district committees as now constituted be added to the present committee. The motion was seconded, and it was so voted.

Committee to Meet with the Officers of the Bay State Rehabilitation Clinic

Dr. Charles H. Bradford submitted the report as printed and assured the committee that the clinic had the approval of the Commonwealth, that the doctors and laymen behind it were outstanding and that the orthopedic surgeons were behind it.

On a motion duly made and seconded, the first three recommendations were approved without further discussion.

Dr. Maclachlan moved the approval of the fourth recommendation after the President assured the committee that if the Council approved he would appoint the same committee. The motion was seconded, and it was so voted.

Advisory Subcommittee on Medical Education

This informational report was presented as printed, by Dr. Jankelson and accepted as such by the Executive Committee.

Committee on Diabetes

Dr. Howard F. Root presented the report as printed and asked permission to add a supplementary report. The Executive Committee gave its permission. (A mimeographed copy has been sent to each councilor with this report.) Dr. Fallon moved approval of the resolution, and the motion was seconded. There were several laudatory comments on the work of the committee, the benefits to the public and the fact that the whole program was a fine example of American medicine. The motion was carried unanimously.

Subcommittee on Blue Cross-Blue Shield Problems

Dr. Charles J. E. Kickham presented the report and stated that the first recommendation (line 27, page 26) was to make permanent the position held so successfully by Dr. McKittrick during the past year. On motion duly made and seconded the recommendation was approved.

Dr. Kickham said that the second recommendation had originated with the Director of Blue Shield to get new blood into the fee committees. He also said that the third recommendation follows as a result of the second, and that the word "fee" should precede the word "committees" in line 35. On motion duly made and seconded these recommendations were approved. Dr. Kickham read the next recommendation, beginning on line 44, page 26. At the suggestion of Dr. Allen it was moved and seconded that the recommendation be approved and that lines 42 to 48 inclusive not be published in the proceedings. The motion was carried.

Dr. Kickham pointed to a typographic error on line 10, page 27: "dorian" should read "clarion." With this correction, the report was approved as a whole.

Committee on By-laws and Council Rules

The report was submitted as printed with the correction of typographical errors on line 27, page 27: "by" and "rules" should be capitalized.

On motion duly made and seconded, the report was approved as a whole.

The President called for a motion to adjourn. The motion was made, seconded and so voted at 4:40 p.m.

H. Quimby Gallupe, *Secretary*

APPENDIX NO. 3

Report of the Committee on Membership

The question was discussed whether there was any need for providing additional categories of membership in the Society to take care of physicians who might not be able to pay full membership dues. At a previous meeting in August, 1948, the Committee on Membership had been requested to make an investigation of this question and report their recommendations to the Executive Committee.

Four categories of physicians who might be unable to pay the full membership dues were discussed. First, medical students and hospital interns. It was believed that there was no particular advantage to these men in being full members of the Society and that the present arrangement, by which they were invited to attend all Society meetings and receive the *New England Journal of Medicine* by subscription, fully covered their needs.

Secondly, hospital residents. It was believed that very few of these men would be interested in full membership in the Society and if they were unable to pay the full dues they could apply for remission of dues on the grounds of financial hardship.

Thirdly, physicians on salaries from the Government and other agencies whose salaries are so low that payment of dues might be a hardship. It was believed that these physicians could be helped by applying for remission of dues on grounds of financial hardship.

Fourthly, physicians who are in their first year of practice and whose incomes might be limited. It was believed that these physicians definitely required the privileges of full membership in the Society and that the $25.00 dues (amount-

ing to little more than $2.00 a month) should be regarded by them as part of their investment in their medical careers and in fact, should be regarded as the most essential of their early medical expenses. It was believed that they could well afford $2.00 a month in return for the valuable privileges that membership in the Society gives them and that there was no need for considering lowering membership dues for them.

Finally, the question of staggering dues from a lower level for young physicians to a higher level for older physicians, as is done by the Harvard Club, was discussed. It was believed that this would be an unwise practice since the dues of the Society represent payment for privileges received and are the same regardless of age or length of practice of the physician. The higher dues might cause more hardship to older physicians, whose incomes would be decreasing instead of increasing in later years of practice.

For these reasons, the Committee on Membership could see no need for any new categories of membership or change in the present schedule of dues. Any exceptional cases could be adequately handled under the current by-laws.

LEWIS S. PILCHER, *Chairman*
WILLIAM A. R. CHAPIN
PEIRCE H. LEAVITT
FRANCIS P. MCCARTHY
SAMUEL N. VOSE

APPENDIX NO. 4

REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

The meeting of the Public Relations Committee of the Massachusetts Medical Society was held at the Harvard Club at 6:00 p.m., October 27, 1948. In addition to the representatives of eleven district societies there were present: President Daniel B. Reardon, chairman of the Committee; Dr. H. Quimby Gallupe, secretary of the Massachusetts Medical Society; Dr. John F. Conlin, director of medical education and information; and Mr. Robert St. B. Boyd, executive secretary.

The report of the Secretary, as printed in the advance notice of the meeting of the Council on October 6, 1948, was accepted.

Many of the representatives of the district societies reported the programs that had been initiated in their respective districts for emergency medical coverage. It was suggested that telephone companies could be of great help in securing physicians for emergency medical care, and that chambers of commerce were very willing to help in setting up emergency medical programs, more especially for daytime coverage.

It was unanimously voted that each representative notify the Secretary, Dr. Gallupe, of the particular plan for emergency medical coverage in effect in his District.

It was the unanimous opinion of the Committee that Dr. John F. Conlin, as director of medical education and information, should be privileged to attend all committee meetings he may desire and distribute the information as he shall deem necessary.

Dr. H. A. Robinson, Norfolk South, reported to the Committee his very favorable impressions of the work of the National Physicians Committee as a result of his recent attendance at a meeting of this organization. It was his opinion that there should be more effective co-operation with the National Physicians Committee through a more widely endorsed Massachusetts branch.

Dr. John F. Conlin discussed with the Committee the problem of the relation of the physician in matters of publicity, particularly with reference to the press and radio. It was his opinion that some sort of code should be established whereby physicians could govern themselves with reference to the release of information that might be considered of public interest. He, therefore, presented to the Committee a code that was recommended by the Executive Committee of the Eye and Ear Infirmary to the Board of Physicians in Ophthalmology and Otolaryngology for their consideration, because it was felt that such a code, if accepted by these two bodies, would further hospital publicity and afford a standard that would be welcomed by individual staff members faced with publicity problems. That code is as follows:

a. The doctor's name may be used with the permission of the Chief of Service and the Infirmary's Assistant Director, to publicize the work of the Infirmary where the doctor is identified as a member of the staff rather than as an individual and where the accent is on the service and not on the individual doctor.

b. The doctor's name may be used in connection with an individual case with the consent of the individual doctor as well as permission as above, where the case illustrates the work of the Infirmary and the accent is on the service to the patient and not on the doctor.

c. The doctor's name may be used in information about a service or a patient, with permission as in *a* above, where the newspapers have most of the facts and are calling the Infirmary to verify data received through other sources.

d. The doctor will supply information to the Public Relations Office on cases that are of interest to the newspapers, so that this office may issue accurate and beneficial bulletins.

e. The doctor will feel free to supply data on cases that illustrate the services of the Infirmary provided the patient is willing to have his name used.

f. The doctors on the staff may be relieved of calls from the press by stating that all Infirmary publicity is handled through the Public Relations Office. If, however, any contact is made by a doctor on the staff with the press or radio or a nonprofessional publication, the Public Relations Office requests that they be informed immediately.

This had been revised by the Committee on Ethics and Discipline of the Massachusetts Medical Society since the meeting of the Committee on Public Relations, as follows:

(Revised.) The doctors on the staff should refer all calls that come to them from the press and that deal with Infirmary publicity, to the Public Relations Office, to be cleared as in *a* above. If any contact is made by a doctor on the staff with the press or radio or nonprofessional publication, the Public Relations Office should be informed immediately.

g. The staff will keep in mind the needs of sound hospital publicity and will make suggestions to the Public Relations Office about cases or services that could be publicized.

h. A staff member will be willing to be interviewed by name on a phase of the Infirmary's work if the Chief of Service approves and, if it is a newspaper interview, if the reporter is willing to submit proof before publication.

It was the unanimous opinion of the Public Relations Committee that this code, which could serve as a standard by physicians in matters of publicity, should be referred to the Committee on Ethics and Discipline for their approval.

Dr. John F. Conlin further informed the Public Relations Committee of the various activities of his office.

a. He served as Chairman of the local Publicity Committee at the American Public Health Association Meeting in Boston recently.

b. At the National Public Relations Conference, which is to be held at St. Louis just prior to the interim session of the House of Delegates of the American Medical Association (November 30–December 3, 1948), Dr. Conlin will address the Annual Conference of Secretaries and Editors of State Medical Associations on the use of radio in medical society Public Relations programs.

c. Requests for information and for speakers on "Socialized Medicine" are increasing. There is thus urgent need for study and dissemination of information concerning basic economic factors affecting medical practice.

d. Favorable progress is being made with reference to the Health Conference sponsored by the Society. An Executive Committee has been formed and will meet to organize. It is planned to bring together a large group of "consumers" and "distributors" of medical care for a two-day meeting in Boston next February.

e. Attention was again called to the fact that, of the 9100 physicians in Massachusetts, only 6600 are fellows of the Society. It is felt that there is urgent need for the extension of the Gallupe Plan in various hospitals and for the intensification of efforts to make educational facilities

available to physicians desiring to qualify for membership in the Massachusetts Medical Society.

f. Progress continues in the field of inter-professional relationship. Drs. Reardon and Conlin were recently speakers at a meeting of the Metropolitan District Dental Society.

g. The current status of the Anti-vivisection and Pound Law legislation was briefly reported. A special committee to study the use of animals for medical experimentation has been appointed by the general court and the governor. This commission, of which Dr. Conlin is one of the eleven members, is expected to report its findings in December, 1948.

h. With reference to the matter of the Health Exhibit to be sponsored by the Massachusetts Medical Society in the fall of 1949, a committee is expected to function in the immediate future with reference to this project.

i. Visitations by the officers of the State Society to the various Districts are reported to be of distinct benefit and should be encouraged.

j. There is a definite falling off in the number of complaints received concerning night calls and lack of availability of physicians for emergency medical coverage. However, there still remains much to be done by the District Societies with reference to this important matter.

k. The press and radio in Massachusetts have generally been favorable to the cause of high standards of medical practice and to the promotion of public health. A cross-filing system has been found to be very helpful in the assembling of news coverage and editorial attitudes of most publications. There has been a distinct increase in the activities of the District Societies to assist the State Society in its work. Also, voluntary agencies and public officials, working in the field of health, have shown an excellent willingness to co-operate with the Society in its various endeavors and programs.

The meeting adjourned at 10:00 p.m.

HAROLD R. KURTH, *Secretary*

APPENDIX NO. 5

REPORT OF THE COMMITTEE ON LEGISLATION

An informal meeting was held on May 24 without organization of the committee for the 1949 session. It was voted, however, that S. L. Skvirsky, councilor from Norfolk, act as chairman until a permanent chairman could be elected.

At the meeting held on October 6, 1948, the general policies, procedures and activities of the committee were discussed and formulated. Special powers were again delegated to an executive committee of five, to be appointed by the chairman of the committee. Mr. Charles J. Dunn was again named legislative counsel. The 1949 budget was discussed and action was postponed until the next meeting.

At the November 17 meeting the following officers were elected: chairman, Solomon L. Skvirsky, Norfolk; secretary, David L. Belding, Norfolk South; and assistant secretary, Alfred L. Duncombe, Plymouth.

The 1949 budget was considered, and in view of the greater activity in national legislation it was voted to submit a budget for $6500 to the Committee on Finance. After considerable discussion regarding the status of the Committee on National Legislation, it was voted that the president of the Society appoint annually a committee on national legislation after consultation with the Committee on Legislation; that all reports and actions of the subcommittee be cleared through the legislative committee; and that the president make such additional emergency and temporary appointments for handling national legislation as in his opinion the situation demands. The matter of probable new legislation regarding the registration of nurses came to the attention of the Committee. It was voted that the Committee recommend to the Council that the president appoint a committee of five to meet with the Massachusetts Nursing Association.

The 1949 Massachusetts legislative session will begin on January 5, 1949, and in all probability new committees in both branches of the General Court will be named at this time. It is hoped that the printed bills will be available also.

The role of the federal Government in the development and financing of social programs in the fields of health and social welfare generally is a factor of major importance.

The Eightieth Congress enacted several new health laws. They voted increased appropriations to expand many of the existing federal and state health and social welfare programs. Neither the Taft Bill (S. 545) nor the Wagner–Murray–Dingell Bill (S. 1320) was acted upon because it was decided that further study was necessary. This respite was made possible by the adoption of Senate Resolution 249 — introduced by Senator H. Alexander Smith, of New Jersey. The resolution provided for the use of the Subcommittee on Health $10,000 to continue its study of national health problems.

The Hoover bipartisan commission established to study and prepare plans for reorganization of the federal Government will submit its recommendations to Congress early in January. Action on the favorably reported bill to create a department of health, education and security under a head with cabinet rank was postponed until the Hoover Commission makes its report.

The officers and the following legislative councilors will constitute the executive subcommittee on legislation: William E. Browne, Suffolk; Arthur H. Riordan, Hampden; and John B. Butts, Worcester.

SOLOMON L. SKVIRSKY, *Chairman*

APPENDIX NO. 6

REPORT OF THE COMMITTEE ON ARRANGEMENTS

A meeting of the Committee on Arrangements was held at 8 Fenway, November 10, 1948. Besides the members of the Committee and officers of the various scientific sections of the Society, the meeting was attended by President Dr. Daniel B. Reardon, President-Elect, Dr. Arthur W. Allen, Dr. W. Richard Ohler, of the Committee on Postgraduate Education, Dr. George R. Dunlop, of Worcester, and Mr. Robert St. B. Boyd.

Attention was called to the fact that the first committee on arrangements had been appointed February 20, 1849, and that the present committee is, therefore, the one hundredth consecutive such group to serve the Society. The only older committee is that on publications, which was established in 1825 and which has functioned since then without interruption.

The 1949 annual meeting will be held at the Memorial Auditorium in Worcester, May 24, 25 and 26. It is interesting to note that the first meeting of the Society held outside Boston was in that city — in May, 1851. Since then the Society has been the guest of the Worcester District three times: in 1928, 1934 and 1939.

The formation of a three-day scientific program, which shall include at least some subjects acceptable to all members of the Society, avoiding matters that are too technical and covering for the most part problems with which the general practitioner has to deal, is not an easy matter. It requires careful, thoughtful and unhurried study, involving, as it does, the selection of speakers as well as of subjects.

In approaching the problem this year, the Committee has followed the recent custom of inviting the officers of the several sections to sit in with us and to give us suggestions toward the attainment of such a program. Their contributions have been very helpful and will form the basis of the final program.

The Committee has also received requests regarding subject matter for the program from practicing members in various parts of the Commonwealth and so far as practicable their requests will be included.

The Worcester District Society, through a committee headed by Dr. George Dunlop, is working in close co-operation with the Committee and through them it is hoped that a goodly representation of speakers from the central and western parts of Massachusetts will consent to give papers and that the hospitals in those sections will favor us with interesting exhibits. In response to several requests present plans call for more movies because of their educational value than have recently been shown.

The newly formed Woman's Auxiliary of the Massachusetts Medical Society will be responsible for entertaining the ladies, with Mrs. Charles Ayers, of Worcester, the vice-president, as chairman. As usual, the countless details of

organizing the mechanics of the convention are under the efficient direction of Mr. Robert St. B. Boyd, executive secretary of the Society. For his interest and tireless effort the Society is greatly indebted.

HAROLD G. GIDDINGS, *Chairman*
FRANKLIN G. BALCH, JR.
GORDON DONALDSON
ALBERT EHRENFRIED
JOHN W. NORCROSS

APPENDIX NO. 7

REPORT OF THE COMMITTEE ON FINANCE

The Committee on Finance presents its report of the expenditures of the Society during 1948. Figures for November and December are estimated, so that the total amounts are only approximate, but reasonably accurate. The budget for 1949, agreed upon by the Committee at a meeting held November 23, 1948, is also presented.

The 1949 budget exceeds that for 1948 by nearly $56,000, representing added expenditures of more than $10 for each member of the Society and amounting to an increase of about 65 per cent over last year. This rise is accounted for largely by the cost of membership in the Boston Medical Library ($27,000), the contribution to the Medical Benevolent Society ($10,000) and increases in salaries ($11,000), all of which were authorized by vote of the Council or requested by officers of the Society or have appeared in committee budgets.

Your approval of these salary rises is invited in the following recommendations by the Committee (all of which are included in the budget):

An increase of $1500 in the salary of the Director of Medical Information and Education above that provided in your action last year by which annual increases were to amount to $500 each year until a total salary of $10,000 was reached. It is the opinion of the officers of the Society, the members of the original committee that chose the Director and of other representative fellows that the full salary should be paid beginning in 1949 instead of in 1952.

An increase of $1200 in the salary of the Executive Secretary requested by the officers of the Society and approved by the Committee.

Provision of a salary of $500 for the Assistant Treasurer, whose duties have increased under the present situation requiring the preparation of tax returns.

Provision of secretarial service for the Director of Medical Information and Education at a cost of $2000.

Provision of secretarial service for the Committee on Legislation, which would add $2000 to the sum otherwise allotted this committee.

It is only proper that the attention of the Society be called to the fact that our expenses are closely approaching our estimated income in amount. If we are able to live within our budget during 1949, there will be a surplus of only $8000 to be turned into the Building Fund. If our expenses continue to rise, provision for a larger income, presumably by a further increase in the annual dues, will have to be considered. This is desired by no one. The alternative is a conscious effort on the part of all concerned to reduce expenses wherever possible.

ROBERT W. BUCK, *Chairman*
FRANCIS C. HALL
FABYAN PACKARD
BANCROFT C. WHEELER
CHARLES F. WILINSKY

DETAILED EXPENDITURES — 1948

Salaries:		
Secretary (up to July $3,300; since July $5,000)		$8,300.00
Executive Secretary		4,800.00
Treasurer		2,000.00
Assistant Treasurer		500.00
Director of Medical Information and Education		8,000.00
Expenses of Officers		
President		
Harvard Club	$26.12	
Personal	163.54	
Travel	48.08	
	237.74	
Estimate for November and December	138.00	
	375.74	375.74
President-Elect		
Harvard Club	4.95	
Estimate for November and December	74.00	
	78.95	78.95
Secretary		
Printing	1,708.92	
Travel	264.04	
Reporting meetings	314.10	
Supplies	293.98	
Telegrams	25.28	
Washington Report	39.40	
Binding	71.75	
Meals	2.62	
Petty cash	5.50	
Tuition of office secretary	42.50	
	2,768.09	
Estimate for November and December	625.09	
	3,393.09	3,393.09
Treasurer		
Premium on bond	37.50	
Public accountant	315.00	
Rent deposit box	18.00	
Petty cash	27.65	
Loomis-Sayles Company	1,266.62	
Printing and envelopes	237.44	
	1,902.21	
Estimate for November and December	176.00	
	2,078.21	2,078.21
Director of Medical Education and Information		
Newsclip	231.40	
Equipment	681.48	
General expenses through May	1,083.76	
Mailing and addressing	326.84	
Telegrams	148.21	
Travel	184.68	
Petty cash	91.64	
	2,748.01	
Estimate for November and December	1,700.00	
	4,448.01	
Credit incorrect charge belonging to Pound Law account	300.00	
	4,148.01	4,148.01
Delegates to A. M. A.	1,886.75	1,886.75
Shattuck Lecture	200.00	
Deduct Income Shattuck Fund	183.34	
	16.66	16.66
Cotting Luncheons	450.00	
Deduct Income Cotting Fund	160.00	
	290.00	290.00
General Administrative		
Servicing and supplies for machines	407.20	
Envelopes, paper, stamps, office equipment	2,322.34	
Telephones	592.99	
Printing and binding	239.80	
Addressing	25.00	
Petty cash	478.38	
Mailing	77.29	
Insurance	58.14	
Washington Report	15.00	
Microphones, cabinets, etc.	214.75	
Premiums on Blue Cross	144.00	
Travel — Mr. Boyd and Dr. Garland	361.66	
Meal with real estate agent	3.95	
	4,940.50	
Estimate for November and December	907.00	
	5,847.50	
Credit Addressing Service District Societies	194.81	
	5,652.69	
Massachusetts Medical Society Clerical	6,240.00	
	11,892.69	11,892.69
Committees		
Executive		
Meals	33.05	33.05
Legislation		
Charles Dunn	3,500.00	
Telegrams	143.98	
Mailing	32.09	
Meals	395.04	
Secretarial expenses	29.86	
Legislative Reporting Service	231.88	
Subscription Washington Report	45.00	
Travel — Dr. Bagnall	83.92	
	4,461.77	

Estimate for November and December...	58.00	
	4,519.77	
Credit on Parker House bill	8.00	
	4,511.77	4,511.77
Public Relations		
Meals	187.77	
To Massachusetts State Nurses Association	50.00	
	237.77	
Estimate for November and December...	298.00	
	535.77	535.77
Arrangements		
Tickets and printing	655.00	
Badges	162.87	
Envelopes and supplies	780.20	
Petty cash	38.81	
Refunds on booths	330.00	
Vassar scholarship	62.50	
Proofreading	4.50	
Prizes	45.70	
Travel expenses — speakers	572.95	
Mailing	111.10	
Refunds on tickets	21.00	
Entertainment — ladies	588.00	
Ladies' Committee expenses	374.02	
Publicity	92.36	
Golf Tournament	15.00	
Statler bill	9,253.76	
Quarter rental hall — Worcester	250.00	
	13.357.77	
Estimate for November and December...	46.00	
	13,403.77	
Income	16,677.95	
Expense	13,403.77	
Profit	3,274.18	
Ethics and Discipline		
Meals	53.39	
Petty cash	.40	
	53.79	
Estimate for November and December...	10.00	
	63.79	
Credit overpayment	.47	
	63.32	
Deduct Income Brickley Fund	20.00	
	43.32	43.32
Finance	—	
Industrial Health	41.83	41.83
Medical Defense		
Palmer, Dodge, Chase & Davis	2,244.37	
Estimate for November and December...	628.00	
	2,872.37	2,872.37
Membership		
Estimate for November and December...	41.00	
	41.00	41.00
Publications		
Meals	38.21	
Estimate for November and December...	28.00	
	66.21	66.21
Public Health		
Massachusetts Central Health dues	10.00	
Meals	31.25	
	41.25	
Estimate for November and December...	40.00	
	81.25	81.25
Society Headquarters		
Electricity	227.86	
Cleaning	215.50	
Rent	2,437.48	
Painting	695.00	
Electrical installations	307.00	
Carpentry	64.00	
	3,946.84	
Estimate for November and December...	946.00	
	4,892.84	
Credits	69.16	
	4,823.68	4,823.68

Special Committees			
Information Bureau			
Wages		2,184.00	
Supplies		161.42	
Stamps		176.00	
Extra secretarial		61.93	
		2,583.35	
Estimate for November and December...		176.71	
		2,760.06	
Credits		5.04	
		2,755.02	2,755.02
Cancer		—	
Fee Schedule		—	
Malpractice Insurance		—	
Medical Economics		—	
National Emergency Service			
Printing and postals		176.50	
Dr. Gallupe to Chicago		37.05	
		213.55	213.55
New England Postgraduate Assembly			
Envelopes and supplies		745.90	
Printing		367.19	
Advertising		128.00	
Addressing		108.02	
Refund		2.50	
Cash for registration desk		100.00	
		1,451.61	
Estimate for November and December...		3,901.00	
		5,352.61	
Income	6,502.50		
Expense	5,352.61		
Profit	1,149.89		
Postgraduate Education			
Printing		350.73	
Lectures		2,234.79	
Envelopes, addressing and mailing		266.41	
Meals		171.89	
Janitor, Sanders Theater		80.00	
Expenses, Sanders Theater		371.71	
		3,475.53	
Estimate for November and December...		155.00	
		3,630.53	
Credit — Commonwealth of Massachusetts		575.00	
		3,055.53	3,055.53
School Medical Services		—	
Special Services		—	
Expert Testimony			
Meals		88.83	88.83
Tax Supported Medical Care			
Meals		36.31	36.31
Other Expenditures			
Refund to district societies			8,000.00
Dues, Council N. E. State Medical Societies			100.00
To carry *New England Journal of Medicine*			5,000.00
Premium, Pension Plan		4,233.80	
Less dividend		153.40	
		4,080.40	4,080.40
Pound Law Account			
Mailing and postage		348.07	
Advertising		1,967.60	
Letters and envelopes		275.00	
		2,590.67	
Income received in gifts		2,800.00	
Refund on advertising		7.56	
		2,807.56	
		2,590.67	
	Profit	216.89	
To Friends of Medical Progress		216.89	
		000.00	
Taxes — 1948			
Federal Old Age Tax	171.00		
Estimate 4th Quarter	34.00		
	205.00		205.00
State Unemployment Tax	461.66		
Estimate 4th Quarter	90.00		
	551.66		551.66

Federal Unemployment Tax		
Paid at year end 0.3% of all wages, less deductions. Estimate		62.00
Prior Taxes paid in 1948 (*will not recur annually*)		
1. State Unemployment Tax for last quarter 1944 and all of 1945, 1946, 1947	1,060.05	
2. Interest charge on same	100.58	
3. Additional tax on 1947 for unlawfully claiming deduction on Pension Plan Premium	114.31	
	1,274.94	
Prior State Unemployment Tax on *Journal* for last quarter of 1944 through all of 1947. Amount assumed by Massachusetts Medical Society (one-half total of $2,179.91) by vote of Council	1,089.96	
	2,364.90	2,364.90
Amount Paid to Boston Medical Library	25,660.00	
Estimate for November and December	1,180.00	
	26,840.00	26,840.00

Profit and Loss Account		
General Fund Loss	898.34	
General Fund Profit	31.25	
Net Loss	867.09	867.09
		$115,030.64
INCOME, 1948		
Censor Fees	$495.00	
Estimate for November and December	738.00	
	1,233.00	1,233.00
Sale of Directories	164.00	164.00
Annual Dues	129,588.00	
Estimate for November and December	6,200.00	
	135,788.00	
Less refunds	143.00	
	135,645.00	135,645.00
Nonresident Dues	2,508.00	
Estimate for November and December	12.00	
	2,520.00	2,520.00
Income, General Fund	5,305.49	
Estimate for November and December	1,211.00	
	6,516.49	6,516.49
Profit, Committee on Arrangements		3,274.18
Profit, Postgraduate Assembly		1,149.89
		$150,502.56

REPORT OF COMMITTEE ON FINANCE — BUDGET FOR 1949

BUDGET 1948	EXPENDITURES 1948		BUDGET 1949		CHANGE
		SALARIES			
$(6,600.00)	$8,300.00*	Secretary	$10,000.00	+	$3,400.00
4,800.00	4,800.00	Executive Secretary	6,000.00	+	1,200.00
2,500.00	2,500.00	Treasurer	2,500.00		—
—	—	Assistant Treasurer	500.00	+	500.00
8,000.00	8,000.00	Director, Medical Information and Education	10,000.00†	+	2,000.00
		EXPENSES OF OFFICERS, ETC.			
300.00	375.74	President	300.00		—
100.00	78.95	President-Elect	100.00		—
3,500.00	3,393.09	Secretary	3,500.00		—
2,000.00	2,078.21	Treasurer	2,000.00		—
(2,900.00)	4,148.01	Director, Medical Information and Education	6,060.00‡	+	3,160.00
1,600.00	1,886.75	Delegates to A.M.A.	2,500.00	+	900.00
200.00	16.66§	Shattuck Lecture	20.00§	−	180.00
350.00	290.00	Cotting Luncheons	300.00	−	50.00
9,100.00	11,892.69	General Administrative Expense	12,000.00	+	2,900.00
		COMMITTEES ELECTED BY DISTRICT SOCIETIES			
400.00	33.05	Executive	200.00	−	200.00
5,000.00	4,511.77	Legislation	6,500.00	+	1,500.00
600.00	535.77	Public Relations	600.00		—
		STANDING COMMITTEES			
200.00	Profit	Arrangements (Income over expense $3,274.18)	200.00		—
50.00	43.32	Ethics and Discipline	50.00		—
25.00	—	Finance	25.00		—
400.00	41.83	Industrial Health	150.00	−	250.00
1,500.00	2,872.37	Medical Defense	2,000.00	+	500.00
150.00	41.00	Membership	150.00		—
200.00	66.21	Publications	75.00	−	125.00
10,000.00	5,000.00	To carry *New England Journal of Medicine*	10,000.00		—
—	—	Publication of new Directory of Fellows	3,000.00	+	3,000.00
250.00	81.25	Public Health	200.00	−	50.00
4,100.00	4,823.68	Society Headquarters	4,100.00		—
		SPECIAL COMMITTEES			
3,500.00	2,755.02	Bureau of Clinical Information	3,000.00	−	500.00
50.00	—	Cancer	50.00		—
—	—	Council Rules and By-laws	850.00	+	850.00
—	88.83	Expert Testimony	—		—
50.00	—	Fee Schedule	—		50.00
200.00	—	Malpractice Insurance	200.00		—
75.00	—	Medical Economics	75.00		—
—	213.55	National Emergency Service	200.00	+	200.00
1,000.00	Profit	New England Postgraduate Assembly (Income over expense $1,149.89)	1,000.00		—
3,500.00	3,055.53	Postgraduate Education	3,500.00		—
75.00	—	School Medical Services	—	−	75.00
300.00	—	Special Services	—	−	300.00
—	36.31	Tax Supported Medical Care	50.00	+	50.00
		OTHER EXPENDITURES			
8,000.00	8,000.00	Refund to District Medical Societies	8,000.00		—
100.00	100.00	Dues, Council, New England State Medical Societies	100.00		—
4,014.00	4,080.40	Premium, Pension Plan	4,100.00	+	86.00
—	—	Medical Benevolent Society	10,000.00	+	10,000.00
—	26,840.00	Boston Medical Library	27,000.00	+	27,000.00
670.00		Taxes	1,000.00	+	330.00
	205.00	Federal Old Age			
	551.66	State Unemployment			
	62.00	Federal Unemployment			

REPORT OF COMMITTEE ON FINANCE — BUDGET FOR 1949 (*Concluded*)

		PRIOR TAXES		
	1,060.05	State Unemployment Tax 1944–1947		
	100.58	Interest		
	114.31	Additional tax on 1947 for unlawfully claiming deduction on Pension Plan Premium		
	1,089.96	State Unemployment Tax on *Journal* 1944–1947, one half of total amount ($2,179.91) assumed by Massachusetts Medical Society by vote of Council		
	867.09	General Fund Loss on sale of securities		
$86,359.00	$115,030.64		$142,155.00	+$55,796.00

*January–July $3,300.00; July–December $5,000.00 (by vote of Council).
†Subject to vote of Council.
‡Includes $2,000.00 for secretary to Director.
§Reduction due to income from Shattuck Fund.

INCOME DURING 1948

(Actual figures available for first ten months of the year; figures for November and December are approximate, but included in total.)

Annual dues	$135,645.00
Nonresident dues	2,520.00
Censor fees	1,233.00
Sale of directories	164.00
Income, General Fund	6,516.49
Profit, Committee on Arrangements	3,274.18
Profit, Postgraduate Assembly	1,149.89
	$150,502.56

APPENDIX NO. 8

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

This report is informational only. The Committee on Industrial Health is alert to the proposed development of a health service for federal employees in Boston in the near future and its probable later extension to the larger communities within the Commonwealth. In this regard your committee chairman has had several conferences with representatives of the United States Public Health Service and this committee, with Dr. J. J. Poutas representing the Committee on Public Health and Dr. John F. Conlin, director of medical education and information, held a formal meeting with Dr. Murphy and Dr. Weiskopf, of the Public Health Service, to be informed upon the workings of the proposed health service. Dr. Murphy had recently completed a survey for the organization of the health service in Boston and was preparing recommendations for its establishment, and Dr. Weiskopf reported upon the operation of the service, which he directs in the United States Treasury Dept., Washington, D. C.

The Health Service for Federal Employees came into being as the result of Public Law 658 favorably passed upon by the Seventy-Ninth Congress on August 8, 1946. Thus far units have been established only in Washington, D. C., St. Louis and New Orleans. The actual establishment and operation of a unit depends upon appropriation of the necessary funds by Congress. So far no appropriation has been made for the proposed unit in Boston, but we are advised by letter of December 10 from the medical director of the Division of Federal Employee Health, United States Public Health Service, that a recommendation for such funds is now in preparation and is to be acted upon by the next Congress.

The law emphasizes the prevention of illness but does not provide for general medical care. Specifically it provides for:

Treatment of on-the-job illness and dental conditions requiring emergency attention.
Pre-employment and other health examinations.
Referral of employees to private physicians and dentist.
Preventive programs relating to health.

It is proposed to establish a main unit in the Federal Building in Post-Office Square, staffed by qualified personnel, physicians, nurses, technicians and others associated with or supervised by the Public Health Service, adequately equipped with x-ray and other diagnostic aids and to establish six so-called satellite units in other federal agencies in Boston proper. In his recent letter the medical director of this service states: "We are quite cognizant with the fact that competent and qualified professional personel today demand and properly should receive-remunerantion commensurate with the duties required of them."

With the approval of Dr. Reardon, president of the Massachusetts Medical Society, the Committee on Industrial Health and the representatives of the United States Public Health Service have mutually agreed to co-operate in the development of this health service for federal employees in Boston and in the Commonwealth of Massachusetts to the end that it shall be ethical, that it will be consistent with the high ideals of industrial medicine as interpreted by the American Medical Association and the Committee, and that it will in no way conflict with the privileges of the private physician or his patient relationship but will, rather, enhance them. So far the representatives of the United States Public Health Service have been most co-operative.

DANIEL L. LYNCH, *Chairman*
JOSEPH C. AUB
LOUIS R. DANIELS
JOHN G. DOWNING
HAROLD R. KURTH
FRED N. MANLEY
HENRY C. MARBLE

APPENDIX NO. 9

REPORT OF THE ADVISORY SUBCOMMITTEE ON MALPRACTICE INSURANCE

Since our previous report to the Council letters were sent to 22 insurance companies — all the companies we had reason to believe might write malpractice insurance in Massachusetts. In these letters the insurance companies were informed of the existence of this Committee and of its desire to co-operate with them. Inquiries were also made as to:

Whether the Committee could help in the selection of experts to testify at trials for malpractice.

Whether insurance companies would like to have the Committee review physicians' medical testimony that may seem to be below the standard applicable to members of the Massachusetts Medical Society.

Whether "listeners" at trials were advisable and how often this might be necessary. (Suggested by an insurance company.)

The number of suits currently pending against members of the Massachusetts Medical Society, the number of new suits filed during 1947, and the number terminated that year.

Replies were received from all companies: 5 stated they were not writing malpractice insurance in Massachusetts. Practically all the companies writing this type of insurance, and several who do not, commended the idea of the establishment of this committee and expressed their desire to co-operate.

Eleven companies were very definite that the Committee could help in the selection of experts; one company hedged a bit, and 10 made no comment.

Eight companies stated they would be glad to avail themselves of the services of this committee. The remaining companies made no comment.

Fifteen companies replied to the question regarding "listeners"; 11 companies unreservedly approved the idea; 1

company qualified its approval; 1 company questioned the value of "listeners"; 2 companies said it "would seem to have some merit, but it is something which should be given further study"; 7 companies made no comment.

All the companies writing malpractice insurance replied to the question regarding the number of suits. Sixty-four new suits were entered during 1947; 45 suits were terminated that year either by settlement or verdict. A total of 147 suits were pending.

To this total of 147 suits should be added 9 suits being handled by the Committee on Medical Defense of the Society, or a grand total of 156 suits outstanding.

These figures, of course, may change from day to day, but do give a good idea of the current malpractice situation as it affects the members of the Society. It is possible that some claims were settled before any suit was filed, but it is unlikely that insurance companies would pay any substantial amount unless a suit were entered in court.

At a meeting of the Committee on December 1, 1948, in view of the replies received, it was voted that the following recommendations be made to the Council:

That the Committee compile a list of "listeners" — these names to be obtained by a letter to all the district societies to be read at their meetings, asking that men desiring to be "listeners" communicate with the chairman of this committee.

On request for a "listener" by an insurance company, the company would be furnished with a list of appropriate names and the company would make its own selection and arrangements. This would mean that the "listener" would not be present as representing the Society but as being retained by the insurance company. If he appeared as "listener" for the Massachusetts Medical Society, no gratuity would be paid; this would be considered a service to the Society.

That the Committee compile a list of experts. The district societies would be asked to submit names of men who are willing to testify and their specialty. This list would be submitted to insurance companies on request. The companies would make their own selection and arrangements.

That the Committee review the testimony of members reported as being below the standard expected of members of the Society. If testimony is substandard, this fact would be reported to the Committee on Ethics and Discipline.

That insurance companies be informed of the recommendations approved by the Council.

CARL BEARSE, *Chairman*
WILLIAM J. BRICKLEY
MAURICE FREMONT-SMITH
HORATIO ROGERS
CHARLES D. MCCANN

APPENDIX NO. 10

REPORT OF THE COMMITTEE ON EMERGENCY MEDICAL SERVICE

The exact part to be played by the Massachusetts Medical Society in relation to emergency medical service for the nation is at present uncertain. One fact, however, is clear: arrangements must be made so that doctors in different parts of the Commonwealth are organized to render emergency service in case of need and according to a well thought out plan.

The present committee was appointed by the Council in June. Shortly after its appointment, Dr. N. S. Scarcello introduced to the Council, as new business, a statement from the Worcester District Medical Society, which was referred to the Committee for study.

Briefly put, the Worcester District Medical Society objects to the appointment of members of an emergency medical service committee by the Council, believing that so important a committee should be more representative and should be elected by the district societies.

From the viewpoint of operability, the Worcester District Medical Society appears to have in mind reconstruction of the Procurement and Assignment Service of World War II in its essential details. As will be recalled, during those hectic days each district society had its own procurement and assignment committee with chairman and members appointed in such fashion as the district society desired. The function of such local committees was to keep track of medical needs within their territory, determining which of its physicians could be declared available for military service, which were essential for civilian needs, and what procedures should be adopted to meet any local medical catastrophes that might arise.

After the Procurement and Assignment Service was established by the War Manpower Commission in Washington, its chairman was appointed by the Commission; his task was to obtain information from local committees and to keep track of what was going on at the state level. This he did with the assistance of a committee appointed for the purpose by the Council.

The Worcester District Medical Society believes that a more effective operation of this general plan would result if the chairman of each local committee served on the committee of the Society and if the committee elected its chairman instead of having its chairman appointed by the Council or by an outside agency.

The present committee finds no objection to such a procedure. Therefore, the committee makes two recommendations.

The Committee on Emergency Medical Service shall be appointed by the Council. It shall consist of one representative from each district society, to be chosen in such fashion as each district society may determine, provided that he shall be chairman of the Committee on Emergency Medical Service of his district society and a member of the Council. The chairman of the committee shall be elected from its members on call by the President.

If this recommendation is adopted by the Council, the present committee recommends that it be discharged.

REGINALD FITZ, *Chairman*
CHARLES H. BRADFORD
EDWARD D. CHURCHILL
DONALD E. CURRIER
EUGENE C. EPPINGER
J. ROSWELL GALLAGHER
ALLEN JOHNSON
THOMAS H. LANMAN

APPENDIX NO. 11

REPORT OF THE COMMITTEE TO MEET WITH THE OFFICERS OF THE BAY STATE MEDICAL REHABILITATION CLINIC

The Committee to confer with the Bay State Medical Rehabilitation Clinic met on December 8, 1948, and studied the plans already proposed for putting the Clinic into operation. Representing the Committee, the following members were present: Drs. Reardon, Gallupe, Barr, Hermann, Clark, Bauer, Bradford and Watkins, and representing the Clinic were Dr. Augustus Thorndike and the nonmedical members George Batchelder, Henry White and Charles Hodges. A program already prepared to describe the work of the Clinic was read. It will be referred to in the report as "The program." As a result of this conference, the Committee has the following report to submit:

It has been clearly shown that a substantial number of industrial and nonindustrial accidents, as well as disabling diseases, lead to partial or permanent disability every year. These accidents and diseases cause a heavy burden of loss to the persons who suffer from them, and also the community as a whole is seriously handicapped. Immediate treatment for injuries or sicknesses is available to all through hospital centers and public and private care; but there is a great lack of co-ordinated systems of rehabilitation to carry the patient through convalescence and back to the point where a normal occupation can be resumed. To meet this lack, the Bay State Rehabilitation Clinic has made plans for the organization of a center where the services of medical and surgical consultants and physical and occupational therapists will be combined with social-service aid and with vocational-guidance counselors. By co-ordinating these related services toward the one comprehensive purpose of rehabilitation, this clinic will carry out its plan more completely and on a larger scale than could be done by any individual or private agency. It will help private physicians who may wish to refer to its services any cases under their care, and it will supplement any existing industrial or hospital clinics that may call upon its aid for rehabilitation. The directorate of this clinic is made up of men of outstanding ability, and their program has been studied with

great care. There is no doubt that the work of such a group as this is urgently needed and will be well carried out. The Committee therefore recommends:

That the Massachusetts Medical Society support the Bay State Rehabilitation Clinic with a complete endorsement of its program, and offer full co-operation in helping to carry out its important aims.

That the first clinic should be inaugurated in Boston, to serve eastern Massachusetts, because of the availability of consultants here and the heavy concentration of industrial groups within commuting distance.

That the progress and success of this clinic be used as a guide for opening other clinics in the western part of the Commonwealth as soon as this course should seem practical.

That, having discharged its purpose by rendering this report, the present committee be discontinued and replaced by a working committee to be appointed by the President for the purpose of observing the Bay State Rehabilitation Clinic and consulting with its directors and assisting and making recommendations wherever they may prove helpful as new problems are encountered.

CHARLES H. BRADFORD, *Chairman*
JOSEPH S. BARR
WALTER BAUER
HERRMAN L. BLUMGART
W. IRVING CLARK
OTTO J. HERMANN
ARTHUR L. WATKINS

APPENDIX NO. 12

REPORT OF THE ADVISORY SUBCOMMITTEE ON MEDICAL EDUCATION

The subcommittee was organized on request of Mr. John J. Desmond, Jr., commissioner of education of Massachusetts, to guide him in licensing trade schools for adjuncts to the medical profession.

The Committee met on December 3, 1948, and after careful deliberations, in which the President, President-Elect and Secretary participated as *ex-officio* members, agreed to recommend minimal standards for trade schools in this State. The recommendations were communicated to Mr. Desmond in the following letter:

John J. Desmond, Jr., Commissioner of Education
200 Newbury Street
Boston, Massachusetts

Dear Sir:

A meeting of the Advisory Subcommittee on Medical Education of the Massachusetts Medical Society was held to discuss the problems as outlined by you in the interview you granted the Chairman. The President, President-Elect and Secretary of the Society were present as *ex-officio* members.

The subject of trade schools for training of adjuncts to the medical profession was carefully discussed. It was the consensus of all present that the technical skill required of such adjuncts can be achieved only by proper training and experience acquired in well conducted schools with a proper faculty and supervised work in a hospital. Otherwise, the students cannot become either efficient or reliable and as such may be on the one hand a danger to the public and on the other unable to get and hold positions for which they were trained and spent money and time.

The Council on Medical Education of the American Medical Association has established standards for acceptable schools for medical record librarians, for physical-therapy technicians, for medical technologists and for x-ray technicians. Copies of these are included. These standards were unanimously endorsed by this subcommittee as minimal requirements for corresponding schools within this State. It was felt, however, that the admission requirements may be lowered to high school graduates. The importance of a hospital affiliation must be stressed as an absolute necessity.

Schools for massage should comply with the requirements for physical therapy technicians.

The subcommittee was unanimous in its opinion that no trade schools for electrolysis should be licensed in this State.

We refused to take cognizance of the schools for models as not related to medicine.

We are deeply appreciative of your earnest efforts to elevate the standards of the schools under your supervision and are anxious to co-operate with you further.

Sincerely yours,

I. R. JANKELSON, *Chairman*
Advisory Subcommittee on Medical Education

I. R. JANKELSON, *Chairman*
GEORGE E. GARDNER
RAYMOND H. GOODALE
DONALD A. NICKERSON
WILLIAM A. HINTON
C. GUY LANE
AUGUSTUS THORNDIKE

APPENDIX NO. 13

REPORT OF THE COMMITTEE ON DIABETES

The special committee on diabetes had two meetings, at which time they made plans for co-operation with the American Diabetes Association's program for diabetes detection and particularly Diabetes Week.

In Massachusetts the Committee distributed to every member of the Society a small four-page bulletin entitled "How to Find and Help the Diabetic Patient in Your Community." In addition, throughout Massachusetts there were a number of radio programs on diabetes detection. Certain of the district societies, at least eight in number, made energetic efforts to carry out testing of urine of many patients in the attempt to discover the untreated diabetic patient, and in addition to obtain the co-operation of the druggists in collecting urine specimens and the co-operation of radio and newspapers in disseminating information. On December 6, 1948, a joint meeting of the Middlesex East, Middlesex South, Norfolk, Norfolk South and Suffolk district societies and the New England Diabetes Association was held in Sanders Theater, Harvard University, Cambridge. The program included eight speakers and was well attended.

A list of the committees appointed in the various districts is appended.

The American Diabetes Association's program for Diabetes Week regarded Diabetes Week as merely the initiation of a continuing effort to find the million undiagnosed and untreated diabetic patients in the country and to bring them under the treatment of the medical profession at as early a date as possible. In other areas of the country the steps taken have varied somewhat. In a number of states special committees on diabetes have been appointed by the state societies. In a number of states, district societies have had diabetes committees appointed. However, the main effort was made by local diabetes societies that had been in existence for a few years or were in process of organization, fifty or more in number. Their program varied somewhat, but tended to emphasize special postgraduate training for doctors and education of the lay public by way of radio, newspaper and special meetings, and, finally, diabetes detection through examination of urine or blood of large numbers of patients.

In certain communities highly organized plans are in progress, as in Brookline, Massachusetts, Jacksonville, Florida, and St. Louis, Missouri. Further detection units, in co-operation with the United States Public Health Service, are planned in Wisconsin and West Virginia.

At the time this report is written it is too early to give any quantitative statement about the number of people tested or the amount of publicity given. It may be stated, however, as an incidental fact, that throughout the country 1704 radio stations received a total of 22,000 copies of radio short announcements. Every state and county medical journal received a printed statement, which was sent out through the co-operation of the offices of the American Medical Association.

It is the Committee's opinion that a continued effort should be made to co-operate with national and other state societies to find these diabetic patients and bring them under treatment.

The district societies with committees on diabetes are as follows:

Barnstable District:
Dr. Henry P. Hopkins (Chatham), chairman

Essex North District:
Dr. Robert E. Blais (handling Amesbury and Merrimac)
Dr. Lincoln C. Pierce, Newburyport
Dr. John J. Hartigan, Greater Lawrence

Hampden District:
Dr. Eoline C. Dubois (Springfield), chairman
Dr. Samuel Fox, Holyoke
Dr. Samuel Potsubay, Holyoke
Dr. Harold J. Holleran, Westfield

Middlesex North District:
Dr. Augustine Conroy (Lowell), chairman
Dr. George Duvin, Lowell
Dr. Joseph Sweeney, Lowell
Dr. Leonard Hall, Lowell
Dr. Allan L. Schofield, Lowell
Dr. Philip G. Berman, Lowell

Middlesex East District:
Dr. Milton J. Quinn (Winchester), chairman

Norfolk South District:
Dr. Arthur P. Sullivan, Braintree
Dr. Howard S. Reid, Cohasset
Dr. John R. Hopkins, Hingham
Dr. Frank W. Crawford, Holbrook
Dr. Alexander Young, Hull
Dr. Robert L. Cook, Quincy
Dr. John P. Amerena, Randolph
Dr. Arsham Alemian, East Weymouth

Worcester District:
Dr. George Ballantyne (Worcester), chairman

Worcester North District:
Dr. L. B. Thompson, Gardner
Dr. Wesley Brown, Petersham
Dr. Charles I. Nichols, Baldwinsville
Dr. M. J. Grossman, Athol
Dr. James G. Simmons, Fitchburg
Dr. John J. Curley, Leominster
Dr. Alton B. Skelton, Winchendon
Dr. Clifford Lancey, West Townsend
Dr. John W. Mason, Ashburnham
Dr. Beatrice Perkins, Westminster

HOWARD F. ROOT, *Chairman*
FRANK N. ALLAN
GEORGE BALLANTYNE
JOSEPH ROSENTHAL
JAMES L. SMEAD
JAMES H. TOWNSEND
PRISCILLA WHITE

APPENDIX NO. 14

SUPPLEMENTARY REPORT OF THE COMMITTEE ON DIABETES

The report printed in the Circular of Advance Information had to be written and submitted to the Secretary within forty-eight hours after the end of Diabetes Week, December 6-12. It was necessarily a preliminary report and suffered from omissions. Since that time, further information has been obtained.

It should first be stated that no quantitative statement can be made about the results of the diabetes-detection drive, in this state or elsewhere, that will be complete, because it is undoubtedly true that as a result of the efforts made and the publicity given not only in the medical societies but also by newspaper and by radio, many patients, of whom we have no records, went to doctors' offices for urine tests. Furthermore, many doctors undoubtedly carried out unrecorded tests in their offices. It is also true that in many district societies and towns we do not have a complete statement. Nevertheless, I should like to add to the previous statement the fact that in Bristol South District Dr. William Mason headed the committee that divided up their territory, each man having one town. In Fall River just under 600 persons came in for voluntary urine tests. The numbers reported from Worcester, Lawrence and Boston Board of Health, in addition to the extra tests carried out in Brookline, where a long-term detection campaign has been in progress for a year, indicate that fully five or six thousand persons came for urine tests. Probably many of those who had positive urine tests have subsequently been studied by their own family doctors, to whom reports were sent, and blood tests have been done in many cases.

In Brookline the plan set up by the local board of health, with the co-operation of the United States Public Health Service, requires a blood test in every case.

Great credit is due the officers of the New England Diabetes Association, particularly Dr. W. R. Ohler and Dr. James Townsend, for their efforts to bring about a successful program for the joint meeting of Suffolk, Norfolk, Norfolk South, Middlesex East and Middlesex South in Sanders Theater on December 6. Dr. Albert Hornor acted as chairman of the committee appointed by the Boston Health League.

The campaign for diabetes detection in other parts of the United States has made a very auspicious beginning. The important point to remember is that this campaign has been initiated and carried out by doctors. It is not a drive for money. It is purely a public-service effort on the part of doctors, particularly in organized medicine, with the co-operation of public-health agencies, notably the United States Public Health Service, which has received most favorable comment and support of the press, radio and citizens. It is a campaign in preventive medicine initiated by physicians that deserves very energetic prosecution. It should be remembered as brought out on a radio broadcast here in Boston, in which Drs. Daniel B. Reardon, John F. Conlin, A. J. A. Campbell and Alfred Frechette took part, that the urine test when it is positive gives a diagnostic clue not only to diabetes but also to a variety of other conditions. It is well known that glycosuria is often a striking feature of hyperthyroidism. Glycosuria may give the clue to carcinoma, peptic ulcer and coronary-artery disease. Therefore, when this simple laboratory procedure is carried out and the results are given to the family physician and that family physician carries out a complete examination of the patient, discovery of sugar may lead to discovery of other latent conditions and the bringing to that patient of much needed treatment.

It is quite evident that the public-health and the preventive aspects of this diabetes detection drive have been recognized and accepted by newspapers quite generally throughout the country. It is true that in November a printed summary of the diabetes problem was mailed to 5000 editors of the weekly newspapers of the country. Because of their acceptance of the diabetes drive as an effort in preventive medicine by physicians, if doctors through their organized societies will recognize the opportunity presented here for medicine to take the initiative, to obtain the co-operation of public-health agencies and particularly the co-operation of industry and labor, American medicine can perform a genuine service that will win friends and put our public relations on a much better footing.

The Committee on Diabetes of the Massachusetts Medical Society recommends the adoption of the following resolution:

WHEREAS, The surveys conducted in Massachusetts starting with Diabetes Week have confirmed the high incidence of diabetes previously reported; and

WHEREAS, The interest of the public in this phase of preventive medicine was stimulated with noteworthy advantage; and

WHEREAS, The physicians of Massachusetts have shown their willingness to co-operate as individuals and through their district medical societies; and

WHEREAS, The Massachusetts Medical Society has always been noted for its leadership in preventive medicine; therefore be it

RESOLVED, That the president of the Massachusetts Medical Society be requested to appoint a committee on diabetes to follow up the activities undertaken by the Committee on Diabetes Detection, appointed in 1948, and that this committee be authorized to study and develop further activities in co-operation with private and public agencies for the welfare of the diabetic patients in the Commonwealth.

APPENDIX NO. 15

Report of the Subcommittee of the Executive Committee on Blue Cross-Blue Shield Problems

The Committee held a meeting at the Medical Library on Friday, December 10, at 4:00 p.m. It has also been represented at the following meetings since the last meeting of the Executive Committee:

A meeting of the Blue Shield Central Professional Service Committee at which the past and present organizational relations between Blue Cross and Blue Shield were discussed in considerable detail.

A meeting of Blue Shield Fee Committee Chairmen at which the advisability of increasing Blue Shield's schedule of fees, income limitations and subscription rates was discussed.

A meeting of New England Blue Cross and Blue Shield Directors (trustees) and administrators, at which Dr. Paul Hawley, chief executive officer of Blue Cross and Blue Shield Commissions, explained the proposals to establish a Blue Cross-Blue Shield Association and Health Service, Inc., for the purpose of facilitating the enrollment of national accounts.

A meeting of Massachusetts delegates to the American Medical Association and representatives of Blue Shield prior to the St. Louis meeting of the House of Delegates at which the proposals to establish a Blue Cross-Blue Shield Association and Health Service, Inc., were discussed in detail. In addition the Committee has attempted to be familiar with all related aspects of the subject and to keep the voting membership of the Blue Shield, Executive Committee of the Council and the members of the Society informed about Blue Cross and Blue Shield problems.

The Committee has been advised unofficially that the following action affecting Blue Cross and Blue Shield was taken at the American Medical Association Interim Session at St. Louis (November 30 to December 3, 1948). The House of Delegates approved the entire report of the Reference Committee on Medical Service and Pre-payment Insurance Plans on Wednesday, December 1, 1948. Dr. L. S. McKittrick, of Massachusetts, was a member of this Reference Committee. An abbreviated report follows: resolutions introduced by the Michigan State Medical Society and the Ohio State Medical Association approving the proposals for the establishment of a Blue Cross-Blue Shield Association and a Blue Cross-Blue Shield Health Service, Inc., were discussed for three hours on the morning of December 1. The Reference Committee report follows: "The Committee is in entire accord with the necessity and advisability of extending medical care and coverage of all classes of our population. Your Committee does not believe that sufficient factual data has been supplied to enable it to make an intelligent decision on this most important subject. Therefore, these resolutions *are not approved.*"

A resolution introduced by Oregon called upon the American Medical Association to sever its relations with Associated Medical Care Plans and dissolve itself from any further responsibility for Associated Medical Care Plans' activities. The Reference Committee report was "Disapproved."

The Council on Medical Service introduced a supplemental report on the Associated Medical Care Plans' proposal to form a national insurance company, which contained the following recommendations to the House of Delegates: approve the formation of a national enrollment agency and disapprove the proposal for the formation of a national insurance company; approve the statement delineating the field of operation of the council and A. M. C. P., which was presented to the Board of Trustees in December, 1946, and approved by the Board, but not approved by the A. M. C. P. Commission; recommend that A. M. C. P. make necessary changes in its Constitution and by-laws that would take A. M. C. P. out of the policy-making field and reaffirm the Council's authority to promote the voluntary prepayment plan program in America.

The Reference Committee report was: "Supplemental Report of the Council on Medical Service relative to the Supplemental Report on A. M. C. P. Proposal to form a national insurance company was carefully reviewed. Your Reference Committee recommends the adoption of the Supplemental Report with the following addition to paragraph 1 of the recommendations (Page 4) . . . 'further development of co-ordination of and reciprocity among local plans.' "

A resolution on policy reaffirming the A. M. A.'s belief in the application of the principle of medical care insurance on a voluntary basis was introduced by California. The Reference Committee made a few changes in wording, and then *recommended adoption.*

This subcommittee is of the opinion that rejection of the proposed Blue Cross-Blue Shield Association and Health Service, Inc., by the House of Delegates still leaves the door open to voluntary co-operation by the Blue Shield plans with a health service, incorporated, which will probably be established by Blue Cross alone. As a matter of good business it seems that such co-operation would be desirable.

The Committee is of the opinion that approval by the House of Delegates of the statement delineating the fields of operation of the Council and A. M. C. P. that was presented to the Board of Trustees in December, 1946, and approved by the Board, but not approved by the A. M. C. P. Commission, may result in disintegration of A. M. C. P. inasmuch as the primary concern of this organization is to be: physical setup of plan offices and service equipment, personnel setup of plans; standardization of methods or systems of keeping actuarial data on plan experience; standardization of forms used by plans; uniformity of contracts and provisions for reciprocity among plans; and methods and mediums to be employed in selling and so forth.

There is no question that A. M. C. P. in the three years since its founding has done an outstanding job of promoting and extending the voluntary prepayment principle throughout the United States. If this organization is to be reduced to an informational bureau it is not unlikely that the initiative of its members, who, after all, know more about prepayment than any other group in organized medicine, will be seriously damaged.

A controversial aspect of the Blue Shield relation with the medical profession is the problem of fees for service. Obviously, there is bound to be some difference of opinion and at times dissatisfaction in this regard, on the part of both the Blue Shield's officials and the participating physicians. It is the opinion of the Committee that a mechanism should be established that would tie the fee committees closer to the Society. As a result of discussions with Blue Shield officials, the Committee recommends: that a general chairman of Blue Shield's Committee of Fee Committee Chairmen be appointed annually by the president of the Massachusetts Medical Society; that the executive director of Blue Shield annually request the specialty sections within the Society and the specialty sections without the Society to review the composition of their respective Blue Shield fee committees; and that the executive director of Blue Shield suggest to the specialty sections a uniform method of rotating membership on Blue Shield committees.

The antitrust suits now pending in Oregon and San Diego, California, interest the Committee. It has come to our attention, however, that the Blue Shield is reviewing its policies particularly in regard to payment of nonparticipating physicians, retention of subscribers who leave the Commonwealth and sales policy toward Blue Cross.

It seems that the actions pending in Oregon and California are directed at medical-society policies rather than at medical care plan operations. Therefore the Subcommittee recommends that the Massachusetts Medical Society, through its appropriate committees, review its policies in the light of the antitrust proceedings against the Oregon State Medical Society and the San Diego County Medical Society.

The Committee wishes to advise that the Blue Shield Board of Directors has appointed Dr. Charles G. Hayden to the position of executive director, thus crystallizing an administrative relation that has existed for the past three years. The Committee heartily approves this strengthening of administrative responsibility.

We have been informed that Blue Shield has received many requests from participating physicians for membership in its Services. In view of the present policy of the Society such membership has not been accepted. The Committee plans to investigate this subject further and will report at a later date concerning its deliberations.

In conclusion, the Committee cannot possibly allow this occasion to pass without an expression of heartfelt apprecia-

tion to Dr. James C. McCann for his unselfish and tireless efforts in behalf of our interests. In this day and age of momentous threat to our medical independence, we send out a clarion call for 100 per cent enthusiasm and co-operation on the part of the members of the Massachusetts Medical Society in all the problems that affect the Blue Cross-Blue Shield relations with our organization.

CHARLES J. E. KICKHAM, *Chairman*
JOSEPH C. MERRIAM
HARVEY A. KELLY
JOHN FALLON
PAUL M. BUTTERFIELD

APPENDIX NO. 16

REPORT OF THE COMMITTEE ON COUNCIL RULES AND BY-LAWS

To provide a constant authority to which questions of procedure and by-law changes may be referred by the Council for study, this committee offers the following resolution:

Resolved, That Chapter IV, Section 3, of the by-laws be, and hereby is, amended by the deletion of the "and" (in line 9, page 14) after "Finance" and by the addition under the enumeration of standing committees of the following words, "By-laws and Council Rules."

Resolved, That Chapter VII be augmented by the addition of the following:

Section 16. The Committee on By-laws and Council Rules shall consist of five fellows.

It shall consider all suggested changes to the rules of the Council and the by-laws of the Society.

It shall submit all proposed amendments of the by-laws as provided in Chapter 9 and changes to the Council for action.

(Upon the adoption of said resolution all other committees on by-laws and council rules would be replaced.)

To provide continuous supervision of the problems of benevolence, the following change in the by-laws is proposed, making the existing group of fellows a standing committee:

Resolved, That Chapter IV, Section 3, of the by-laws be, and hereby is, amended by the addition under enumeration of standing committees of the words "and on Benevolence."

Line 9 and line 10, page 14, would then read: "Medical Defense; on Society Headquarters; on Finance; on Industrial Health; on By-laws and Council Rules; and on Benevolence."

Resolved, That Chapter VII be augmented by the addition of the following:

Section 17: The Committee on Benevolence shall consist of five fellows.

It shall co-operate with the Massachusetts Medical Benevolent Society in giving aid to fellows of the Society who are incapacitated through no fault of their own, and to their dependents in case of need.

It shall operate on an annual budget not to exceed the sum allotted by the Committee on Finance and approved by the Council.

It shall remit to the Treasurer all unexpended sums at the end of each year. The Treasurer shall invest such sums in a benevolent fund to be held in reserve for future emergencies.

The Committee recommends the creation of a new board to be known as the Advisory Board.

This board shall consist of the five most recent past presidents of the Society.

To accomplish this, the Committee offers the following resolution:

Resolved, That Chapter VIII be, and hereby is, amended by the omission of the words "of trial" from the title.

Present section 1 will become section 2; present section 2 will become section 3; a new section 1 will read as follows:

The Advisory Board shall consist of the five most recent past presidents of the Society.

It shall meet at the request of the President or the Council.

The functions of the Board shall be advisory.

The Committee recommends that Council Rule 3 be changed to read as follows:

These rules may be suspended, changed or discontinued by a vote in the affirmative of two thirds of the councilors present.

The Committee recommends that the present Council rules numbered 4, 5, 6, 7 and 8 be changed respectively to 5, 6, 7, 8 and 9, and that a new Council Rule 4 read as follows:

It shall be the duty of any committee chairman, submitting a report to the Council, to be present or designate a substitute. The secretary of the Society may be designated unless special background information for informed debate is needed.

The Committee recommends the following preamble to Council Rules:

Rules and regulations are adopted only to promote orderly and reasonably prompt transaction of business. It is the duty of the presiding officer so to apply them that considered decisions may be reached after free and full debate. They should not be permitted to preclude discussion or subvert action.

EDWARD P. BAGG, *Chairman*
ELMER S. BAGNALL
ALBERT A. HORNOR
FRANK R. OBER

APPENDIX NO. 17

REPORT OF THE ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

A meeting of the Advisory Committee to the Woman's Auxiliary to the Massachusetts Medical Society was held at 2:00 p.m. on Friday, October 29, 1948, at 8 Fenway. Drs. David L. Belding, of Norfolk South, Milton J. Quinn, of Middlesex East, and John F. Conlin, of Suffolk, were present.

The Committee in its discussion of a suggested program for consideration by the state auxiliary made a special effort to select fields of activity particularly suited to an organization of physicians' wives interested in promoting the objectives of the Society.

Projects were proposed as follows:

Organization and extension of district auxiliaries and individual membership.

Assistance in supporting and publicizing action of the Society in legislative matters pertaining to medical progress and the public health — as specifically requested. Until state and national legislatures reconvene no specific recommendations can be made. It is anticipated that the Committee on Legislation of the Massachusetts Medical Society may be confronted with consideration of such matters as compulsory national health insurance, antivivisection legislation and a proposal to make animals from public pounds available for medical teaching and research, chiropractic licensing, antivaccination legislation and similar matters. The Legislative Committee of the Auxiliary will be informed of action of the Society's Committee on Legislation.

Co-operation with the Massachusetts Health Conference. It is planned to conduct a week-end meeting in February to bring together about 1000 representatives of consumers and suppliers of medical care. This meeting through panels and smaller groups will study numerous phases of health in the Commonwealth and will make recommendations for improvement during the next five years.

Health Exhibit in the fall of 1949. This project is designed to bring together visual aids and demonstrations of matters pertaining to health and to circulate the Exhibit through the state's population centers.

National Diabetes Week, December 6-12, 1948. Co-operation with the activities of the committee of the Medical Society appointed for this purpose.

Affiliation with the Massachusetts Central Health Council. This organization is composed of agencies and various groups working for the advance of the public health. Representation at its meetings would make its clearinghouse facilities on health matters available to the Auxiliary members.

Encourage the formation of active local health councils. Increased effort should be made to interest the leaders of community thought and activities in matters affecting medical progress and the health of the community.

Health museum. This is a "long range" project. Information will soon be available.

Foster increased interest in adult health education.

Activities to promote friendly relations with wives of medical students, interns and residents.

Assist in making the facilities of the Boston Medical Library and other deposits of medical literature more widely available to the medical profession.

Study problems concerning the shortage of nurses and other matters pertaining to the nursing profession.

Study conditions pertaining to the care of the aged and the chronically ill.

Obtain familiarity with such problems relating to health in the community as housing, food and restaurant sanitation, industrial hygiene and school health.

Study such problems relating to medical practice as the physician's hours of work, hospital staff appointments, night calls, days off, medical meetings, vocations and other matters that have an influence on the physician's family life. An interesting study might concern itself with statistical data on the budgeting of the physician's time. How much time is spent in attending patients without charge in office, clinic or hospital? How much time is spent in medical reading, giving and attending lectures, attending medical meetings and so forth?

Study of the basic economic factors affecting costs of medical care and such related problems as the differentiation between the cost of medical care rendered in the hospital and in the physician's private practice.

JOHN F. CONLIN, *Chairman*
DAVID L. BELDING
MILTON J. QUINN

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

Weekly Clinicopathological Exercises

FOUNDED BY RICHARD C. CABOT

TRACY B. MALLORY, M.D., *Editor*

BENJAMIN CASTLEMAN, M.D., *Associate Editor*

EDITH E. PARRIS, *Assistant Editor*

CASE 35141

PRESENTATION OF CASE*

A forty-nine-year-old tanning-factory superintendent was admitted to the hospital because of abdominal pain.

Seven months before admission, having been previously well, the patient began to have attacks of abdominal pain. The pain, which was always located in the epigastrium just above the umbilicus, was severe, knifelike in character rather than colicky, and did not radiate. It began after breakfast and usually continued for two or three days; it was not affected by lunch or supper. There were periods of four or five days when the pain was absent. The pain was not affected by position, did not prevent sleep and kept him from work about two days of each week. X-ray films were said to show an ulcer at the duodenum, but an ulcer diet failed to improve the symptoms. Subsequently, x-ray films demonstrated the ulcer once but failed to show it another time. There was no nausea or vomiting. The bowels, previously regular, became constipated. There were no foul or foamy movements and no black or tarry stools. His weight fell from 185 to 150 pounds. He also noticed an increased tendency to easy bruising, which he had previously had. Mere rubbing of his eyelids produced a red color, which took about three days to be absorbed. Red spots also appeared on the face and neck. These were never painful, and there was no swelling. Four months before admission he had a particularly severe attack, and an exploratory laparotomy at a community hospital revealed a considerable quantity of bloody fluid. No ulcer was seen. A drain was inserted in the gall bladder. This drained black and later green fluid and finally dried up three months later. The gall bladder was said to have been perfectly normal. The patient required one transfusion.

Following operation he continued to have attacks of abdominal pain as before. He was home for six weeks but returned to the hospital because of pain in the drainage wound. He remained in the hospital about three weeks and was discharged, two weeks before entering the Massachusetts General Hospital. During these two weeks the former pains subsided, but gas pains became more severe and constituted the chief complaint on admission. A diet eliminating fats made no difference in the pain. There was no jaundice, light stools, dark urine or chills or fever. Itching of the skin was noticed in the three months before admission.

The patient had been gassed and temporarily blinded in World War I. There were no sequelae except a chronic productive cough. He suffered some shortness of breath in recent years. Two years before admission, after an episode of sudden weakness and dizziness, he was found to have a low blood pressure and anemia. With iron and liver therapy his blood improved. After this he always noted some red spots, especially on the eyelids and other parts of the face. These were brought on by slight trauma and lasted about three days. There were no other evidences of easy bleeding.

Physical examination showed the patient to be alert and in no great discomfort. There were many excoriations over the arms, neck and upper back. There were also many 3-mm. to 4-mm. red blotches over the neck and face. These had an irregular outline, and were nontender and not raised. Areas of hemorrhage discolored the buccal mucosa and formed bluish, spongy swelling around the bases of the molars. Small, nontender lymph nodes were palpable in the left axilla and the groins. The heart and lungs were normal. On the abdomen there was a 12-cm. scar to the left of the midline in the upper quadrant and a 6-cm. scar in the right upper quad-

*Discussed May 1, 1947.

rant. No masses or organs were palpable. No dorsalis pedis or posterior tibial pulsations were felt. Both feet were cold. The calves were not tender.

The temperature was 97°F., the pulse 70, and the respirations 20. The blood pressure was 80 systolic, 60 diastolic.

Examination of the blood showed a hemoglobin of 13.2 gm. and a white-cell count of 10,500, with 62 per cent neutrophils, 32 per cent lymphocytes and 4 per cent monocytes. Platelets were normal. The urine was normal. The sedimentation rate was 1.05 mm. per minute, corrected to 0.81 mm. per minute. The hematocrit was 41 per cent. The prothrombin time was 15 seconds (control, 15 seconds). The nonprotein nitrogen was 19 mg. and the serum protein 4.63 gm. per 100 cc., with an albumin-globulin ratio of 1.85. The cephalin flocculation and serum amylase were well within normal limits. In the plain film of the abdomen a rather diffuse haziness suggested the presence of fluid. Several slightly dilated loops of small intestine were seen in the upper abdomen. No intra-abdominal calcification was visible.

In the hospital there were several attacks of gaseous distention and epigastric pain. They usually responded to codeine and chloral hydrate. On the fourth hospital day there was a new area of hemorrhage in the skin of the neck following slight trauma; otherwise his condition remained unchanged. Further laboratory examinations made in an effort to discover the cause of bleeding were not very helpful. The bleeding time was four minutes; the clotting times in the first to fifth tubes were 8, 9, 10, 10 and 10 minutes, respectively. A tourniquet test was negative. The blood vitamin C level was 1.6 mg. per 100 cc. No evidence of serum at the end of forty-five minutes of liver failure could be obtained, and only 4 per cent bromsulfalein remained in the serum at the end of forty-five minutes. The stools contained no blood and no undigested muscle. The neutral fat was normal. Soaps and other fat combinations were +++. On x-ray examination both pleural cavities contained free fluid. No intrinsic lesion of the upper gastrointestinal tract could be made out by x-ray study, but there was thought to be evidence of a lobulated pressure defect against the second and third portions of the duodenal loop without definite involvement of the mucosa. The diffuse ground-glass density of the abdomen remained.

On the twenty-fourth hospital day edema developed in the scrotum and penis. On the same day an exploratory laparotomy showed about a pint of clear, straw-colored fluid. The most striking finding was the ease with which all the tissues bled when handled. This was especially true when the small bowel was handled. There were no adhesions. The pancreas was not seen but felt perfectly normal. The liver and spleen also looked normal. Toward the end of the operation the patient developed marked edema of the larynx, which was probably due to the trauma of the intratracheal tube, and this necessitated a tracheotomy.

The immediate postoperative condition was good. Several transfusions had been given during the procedure. On the following day the patient suffered marked respiratory difficulty. Rutin was started in an attempt to reduce capillary bleeding. On the second postoperative day he was pale and breathing with difficulty. He gradually became weaker. The blood pressure fell to 60, and the pulse rose. He died on the same day.

Differential Diagnosis

Dr. Walter Bauer: I have bet ten to one that the pathologist cannot make a positive diagnosis in this case. We shall see if he can.

The skin lesions were never raised?

Dr. Chester M. Jones: That is right.

Dr. Bauer: The hemorrhagic discoloration was only in the region of the molars. Is that right?

Dr. Daniel S. Ellis: He had some on the buccal surfaces, and also one on the tongue.

Dr. Bauer: I think it is very important to have a good description of the gums in this case, because one might want to entertain the diagnosis of monocytic leukemia. However, I do not think this is the diagnosis.

Nothing is said about reflexes or the neurologic findings.

Dr. Jones: They were normal.

Dr. Bauer: Can we accept the statement that this forty-nine-year-old man had no pulsations in his feet? Is this correct?

Dr. Jones: We could not find them.

Dr. Bauer: Did the monocytes ever go any higher than 4 per cent?

Dr. Jones: No.

Dr. Bauer: Did he exhibit an eosinophilia?

Dr. Jones: He never had an eosinophilia.

Dr. Bauer: The smear remained essentially the same throughout the illness?

Dr. Jones: There were no subsequent smears done.

Dr. Bauer: I assume that a bone-marrow biopsy was not done. Is this correct?

Dr. Jones: There was no biopsy of the bone marrow.

Dr. Bauer: I take it that the pleural spaces were never aspirated.

Dr. Jones: No.

Dr. Bauer: I wonder if I might ask why the surgeon kept a drainage tube in the gall bladder. Did he drain it because of the alterations noted in the second and third portions of the duodenum? Was the gall bladder drained because of an acute pancreatitis? Was he treating an acute cholecystitis or trying to prevent it and thereby prevent another attack of pancreatitis? I presume that the surgeon thought the patient had pancreatitis but was unable

to establish the diagnosis at the time of the exploration. Is this correct?

DR. JONES: Yes.

DR. BAUER: I do not believe that he had pancreatitis, but I may be wrong.

May we see the films? They describe a diffuse ground-glass appearance, which is evidently due to fluid.

DR. TOUFIC KALIL: This shows the ground-glass appearance and the separation of the loops of small bowel consistent with fluid. There is fluid in both pleural spaces going into the fissures.

DR. BAUER: This patient never had pleurisy?

DR. JONES: No.

DR. BAUER: And no pericardial friction rub?

DR. JONES: No.

DR. KALIL: This is the gastrointestinal series. There is a pressure defect on a loop of the duodenum. The nodularity described is present here in the second and third portions.

DR. BAUER: How would you interpret the distortion?

DR. KALIL: It is perhaps due to increase in size of the pancreas. The mucosa of the duodenal loop is all right.

DR. BAUER: That neither helps me nor disturbs me. The pancreatic enzymes were normal.

The abdominal fluid and the edema of the scrotum and penis can be explained on the basis of the hypoproteinemia. I wonder why he was explored. Was it because of an attack of pain or other change in clinical course, or is it unfair to ask?

DR. JONES: No. He continued to have attacks of pain, without elevation of temperature, pulse or respirations. The pain was severe and required opiates. There was no rigidity or tenderness at the time of the attack of pain. The pain was always in the same place — in the midepigastrium and went through to the back.

DR. BAUER: Is it known whether he had fever or leukocytosis in the first hospital?

DR. JONES: My impression is that he had no fever.

DR. BAUER: The other interesting finding at operation was the ease with which the tissues bled when handled. Was there hemorrhage in the serosa, or was bleeding observed in all tissues of the abdomen?

DR. JONES: There were several serosal hemorrhages when the abdomen was opened and not due to handling.

DR. BAUER: Did they appear also on handling?

DR. BENJAMIN CASTLEMAN: Dr. Richard H. Sweet said that when he elevated a loop of small bowel there was diffuse oozing over the surface of the small bowel.

DR. BAUER: That is the whole small bowel?

DR. CASTLEMAN: In spots, oozing here and there.

DR. BAUER: I shall take that for what it is worth. The first thing I wondered about as I read the history was whether or not there was any likelihood of benzol poisoning since he had worked in a tannery and may have been exposed to benzol. However, we do not know the kind of tannery or whether benzol was used. Because of his occupation this diagnosis should be considered; however, as one reviews the history one sees little reason for entertaining this possibility.

We are dealing with a man forty-nine years of age, who exhibited three findings we must account for. The fourth, the absence of pulsations in the feet, may not have been related to the primary disease. I wish the pulsations had been felt because the other findings — recurrent purpura lasting only a few days and attacks of abdominal pain — are consistent with a diagnosis of purpura. The abdominal pain lasted only a few days at any one time. The abdomen was opened and contained free bloody fluid. When confronted with a patient with symptoms suggesting diffuse vascular disease, in this case the capillaries, we entertain the diagnosis of periarteritis nodosa. However, there is very little to substantiate this diagnosis. He never had fever or a leukocytosis. In fact, there was very little to suggest the presence of periarteritis nodosa except recurrent attacks of abdominal pain. He did have free bleeding in the abdominal cavity on one occasion, and one might say it was due to rupture of a saccular aneurysm of the type seen in people with periarteritis nodosa. At the second operation it was observed that all tissues bled very easily when handled. This finding is not easily explained on the basis of periarteritis nodosa or on the basis of related or so-called "group disease." I hate to talk about "group disease" because the term can be used as a catch-all. We do not know too much about the pathogenesis of "group disease" (rheumatoid arthritis, rheumatic fever, disseminated lupus, dermatomyositis, periarteritis nodosa and scleroderma). I think this man had the disease described by Osler, Henoch and Schönlein. He falls in the group that Osler[1, 2] spoke of as the erythema group. Erythema multiforme exudativum and Henoch's purpura are included in this group, but, as Osler said, the clinical manifestations of patients included in the erythema group vary greatly, particularly the cutaneous lesions. This term, however, is merely a blanket term and can cover a multitude of sins. These people give a history not unlike that of this patient and may have arterial symptoms in addition. They are very apt to have bleeding into the gastrointestinal tract and may give a history of repeated bloody stools. This patient evidently never had the latter; however, I do not believe that the absence of this finding should disturb us, nor should the absence of arterial find-

ings. The disease may occur at any age and in both sexes but is usually a disease of young people.

I know of no other disease that would give this clinical picture. Though I say I would like to make a diagnosis of periarteritis nodosa, there is not sufficient evidence in the way of clinical findings to substantiate this diagnosis. The patient never had hypertension, abnormal urinary findings, neurologic abnormalities or evidence of serous-membrane involvement. I well appreciate that some cases of periarteritis nodosa can affect only one organ. We have seen patients who had arterial lesions, confined primarily to the pancreas, with minimal or few lesions elsewhere. The initial attack of pain might be interpreted as due to periarteritis nodosa, with a saccular aneurysm in the pancreas that ruptured. This would explain the free fluid in the abdominal cavity. Yet he did not have pancreatitis. I shall say that this man did not have periarteritis nodosa. Furthermore, I do not believe that the pathologist can make a diagnosis and prove it beyond a point of doubt. I think this patient had one of the diseases that Osler included in the erythema group. I should be glad to answer questions and be more than happy to receive helpful suggestions.

Dr. Castleman: Were any autopsies performed in the cases that Osler described?

Dr. Bauer: I am sorry to say that I waited until last night to read the case history, and I found my library inadequate on this point.

Dr. Jones: It was curious that one could palpate the neck and cause a hematoma, and yet a tourniquet on an arm did not produce bleeding.

Dr. Bauer: Some doctors feel very hard.

Dr. Jones: We were advised not to, so we did not.

Dr. Wyman Richardson: How about the low serum proteins?

Dr. Bauer: I cannot explain this finding.

Dr. Jones: We had him on an adequate diet.

Dr. Bauer: He had bled from time to time and may not have been in good enough condition to regenerate proteins.

Dr. Richardson: I think he may well have had something wrong with the liver.

Dr. Bauer: I agree — as part of a generalized capillary disease.

A Physician: Can the abdominal pain be explained by infiltration of blood where it came in contact with the peritoneum — would that not give periodic attacks?

Dr. Jones: The pain was very intense.

Dr. Bauer: Dr. Short, you are the person who called this group of diseases to our attention. What about it? Does it belong in Osler's group or not?

Dr. Charles L. Short: I do not know.

Dr. Bauer: I think it is unfortunate that we use such ill defined terminology. It is a reflection on us as much as on the pathologist.

Dr. Castleman: I have not spoken yet.

Dr. Bauer: I think you are going to talk about this group of diseases and that we will not agree on terminology.

Dr. Short: Is it Henoch's disease?

Dr. Bauer: It is one of the diseases Osler included in the erythema group. Whether it is Henoch's purpura or not, I do not know. One can only say that the capillaries were abnormal. It has been called by all sorts of names, and no one of them tells us anything about the mechanism or the etiology.

Dr. Ellis: Do you think he had disseminated lupus erythematosus?

Dr. Bauer: No, I do not.

Dr. Jones: His physician made a pertinent remark. He wanted to know why we did not find albumin. They found it when the patient was in the other hospital and at home on several urinary examinations. I think he did show a + or ++ test on occasion, but the rest of the time the urine was normal.

Dr. Bauer: I shall re-emphasize one point — the description of the skin lesions and the recurrence of abdominal pain is classic for this disease; it fits it to a "T" as far as I am concerned.

Clinical Diagnosis

Acute disseminated lupus erythematosus.

Dr. Bauer's Diagnosis

Osler's disease—"Erythema group of skin diseases with visceral manifestations."

Anatomical Diagnoses

Primary systemic amyloidosis, involving myocardium, cardiac valves, lungs, spleen, lymph nodes and blood vessels.

Purpuric hemorrhages of skin, intestines and peritoneum, severe.

Cardiac hypertrophy and dilatation.

Renal infarcts, recent, left.

Pathological Discussion

Dr. Castleman: Our findings on examination of the abdominal cavity were almost the same as those at exploration. There were subserosal hemorrhages in the wall of the small bowel, as well as submucosal hemorrhages throughout the entire gastrointestinal tract. The spleen and liver looked perfectly normal, as did the pancreas. The kidneys were perfectly normal in size and appearance except for a few, small, recent infarcts in the left kidney. The heart was enlarged, weighing 450 gm., and on the valves were small white spots, which seem like artifacts on this photograph of the aortic valve (Fig. 1).

This is a slide of the mitral valve (Fig. 2), and it shows exactly the same granules, some extending up on to the auricular wall where there were a few, small, submocosal hemorrhages and going down along the chordae tendineae, which were not, however, thickened or involved with an old process. Similar granules were found on the other valves. When we first looked at these on gross examination we thought they were similar to those seen in lupus erythematosus. The granules, however, were not

FIGURE 1. *Aortic Cusps, Showing Amyloid Deposits.*

so large as those seen in Libman–Sachs endocarditis and were more numerous.

This is a microscopical slide of one of these valves showing the amorphous, very pale-pink appearance. A Congo-red stain of the valve demonstrates that all the material on the cusps is amyloid. The endothelium itself is perfectly normal. It is interesting that amyloid stains of the liver and kidney were negative. Here is a section of lung showing amyloid infiltration of the walls of the small vessels. It is interesting that the usual iodine stain for amyloid was negative, but the Congo-red stain was positive. The heart muscle was extensively involved with amyloid (Fig. 3). The cause of the hemorrhages is well seen in the section of the small intestine (Fig. 4). Here is the normal mucosa; here is a submucosal hemorrhage and in it are all these small arteries extensively infiltrated with amyloid. There is diffuse amyloidosis of the arteries throughout. This case, therefore, is characteristic of the so-called primary systemic amyloidosis, not the secondary type.

DR. BAUER: How can you prove that it was primary amyloidosis and not due to another disease?

DR. CASTLEMAN: There are two main types of amyloid disease. One that we all know about is the secondary type of amyloidosis due to chronic infection, rheumatoid arthritis and a few other conditions. In this type the amyloid infiltration affects almost always the liver, spleen and kidneys. Then there is the so-called primary systemic amyloid disease in which no definite primary disease can be observed anatomically. In this type the amyloid infiltration very rarely affects the liver, spleen and kidney but may affect the heart and lungs primarily, often with diffuse involvement of the vessels throughout the body. That was true in this case. The most marked involvement was in the heart and in the lungs and in the vessels throughout the body. There was a little infiltration of the spleen, which has been reported in so-called primary systemic amyloidosis. It was present, as one can see, throughout the submucosa of the intestine, and these patients very often have hemorrhages. In

FIGURE 2. *Mitral Valve, Showing Amyloid Deposits Extending over the Endocardium and Chordae Tendineae.*

the cases of primary systemic amyloid disease described in the literature, about 40 per cent are prone to bruise easily, probably owing to the fact that the amyloid infiltration of the vessels makes the vessels more vulnerable to trauma.[3] I think one can argue the point and say that this is not a primary disease but is secondary to a disease that we cannot recognize anatomically. The amyloid distribution, however, is quite different from the so-called secondary amyloid disease. Another thing that is common in the primary form is that this type of amyloid does not always take up the usual amyloid

stains. The note is made in a number of articles that the iodine stain is negative and that the Congo red is positive. That was true here. The involvement of the endocardium has been described a number of times and was very characteristic in this case.[3,4] I believe this is the first case in which we have seen amyloid involvement of the cardiac valves.

DR. BAUER: I should still like to take exception. As yet we cannot say that amyloid disease is a complication of rheumatoid arthritis. It may be due to the same mechanism responsible for rheumatoid arthritis.

I do not think that you have necessarily proved that we are dealing with primary amyloidosis in this case, although there is an increasing amount of evidence that patients with diffuse vascular disease are prone to have amyloid disease.

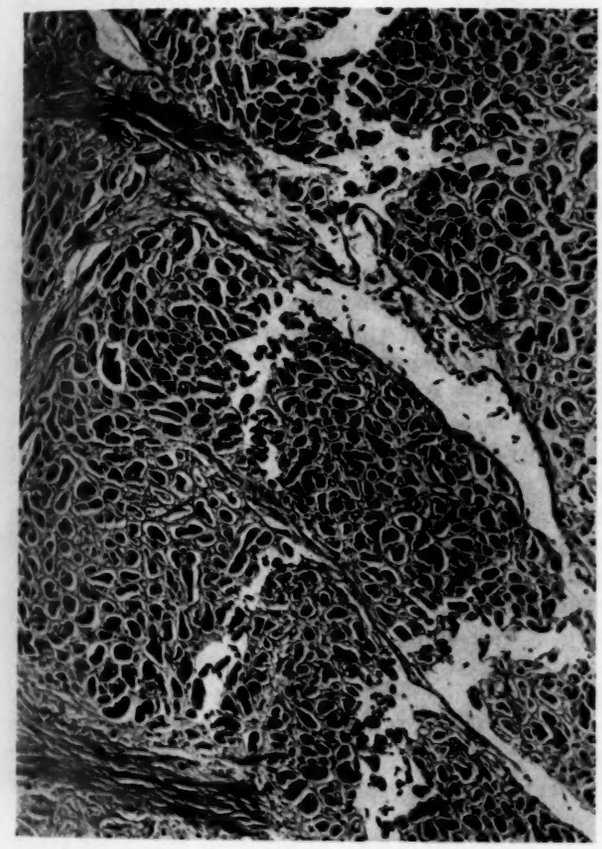

FIGURE 3. *Amyloidosis of the Myocardium.*

DR. CASTLEMAN: It may be true that amyloid associated with rheumatoid arthritis is all primary, but its distribution is similar to the secondary type. Certainly, the particular anatomic findings in this case are what have been seen in a large number of cases.

DR. BAUER: In what has been called primary amyloid disease?

DR. CASTLEMAN: Yes. As yet we have not found a better answer. I suppose the cases that Osler described were not associated with amyloid.

DR. BAUER: I wish we knew the autopsy findings in such cases. It may be that people with primary amyloidosis initially have primary vascular disease. However, this is a guess. We ought to look up the literature and see if autopsy of long-observed cases of so-called Osler's disease showed primary amyloidosis.

FIGURE 4. *Photomicrograph of the Intestine, Showing Amyloidosis of the Walls of the Submucosal Blood Vessels Surrounded by Hemorrhage.*

DR. CASTLEMAN: But until we find out what the primary disease is we have to place this case in the so-called primary atypical amyloidosis group.

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CASE 35142

Presentation of Case

A seventy-five-year-old Portuguese laborer was admitted to the hospital because of epigastric pain, anorexia and loss of weight.

The patient had quit work one year before entry because of weakness, but stated that he had been well up until about two months before admission. His weight had fallen from 154 to 127 pounds. At the same time he had painful, swollen knees, but this complaint had disappeared. Three or four weeks before admission he began to experience intermittent, nonradiating, "burning" pain in the middle and left epigastrium, which occurred half an hour to one hour after meals. The pain was very sharp for ten or fifteen minutes and then wore off. Occasionally, the pain reappeared between meals. Milk and food seemed to relieve it for a while, as did belching. Sometimes he vomited a small amount with relief. There were no changes in bowel habit, and he did not notice the color of the stool. There was no hemoptysis. There was no jaundice, distention, dysphagia or prominent genitourinary symptoms. There had been recent mild ankle edema. A physician had given him pills and a white liquid for the pain, but these gave no relief. Diet during the present illness had consisted of tea, toast, soups and juices.

About twenty-five years before entry he had suffered episodes of epigastric pain, which he could not clearly describe. He continued to work, and eventually these wore off without medication. Several years later he underwent an appendectomy. He denied the symptoms or treatment for syphilis or gonorrhea.

Physical examination revealed a pleasant, elderly man, showing signs of weight loss. There was no jaundice. There was a cataract in the left eye. There were a few, shotty, firm lymph nodes in the axillas, especially on the right. There were prominent inguinal chains bilaterally. The lungs were clear. The heart was boot-shaped, with the point of maximal impulse at about the midclavicular line. There were occasional premature beats, and the aortic second sound was greater than the pulmonic. There was a Grade I, blowing diastolic murmur loudest in the aortic area, a Grade I whine in diastole along the upper left sternal border, and a Grade II systolic murmur heard loudest at the apex but also heard in the axilla and at the base. The abdomen was flat, with normal peristalsis. There was an appendectomy scar in the right lower quadrant. There were no palpable masses or tenderness. The liver edge was palpated one finger-breadth below the right costal margin on inspiration and was prominent across the epigastrium. There was a + ankle edema.

The temperature was 99°F., the pulse 96, and the respirations 18. The blood pressure was 146 systolic, 70 diastolic.

The urine had a specific gravity of 1.015 and gave a +++ test for albumin, and the sediment contained a few white cells and a rare hyaline cast. Examination of the blood disclosed a red-cell count of 2,570,000, with a hemoglobin of 7.5 gm., and a white-cell count of 17,000, with 27 per cent neutrophils, 67 per cent large lymphocytes and 4 per cent monocytes. Anisocytosis and hypochromia were noted. The stools gave a ++ guaiac reaction. The blood Hinton test was positive. The serum protein was 6.20 gm. per 100 cc., with an albumin of 3.86 and a globulin of 2.34 gm. (albumin-globulin ratio of 1.7). The nonprotein nitrogen was 27 mg., phosphorus 3.7 mg., and alkaline phosphatase 3.5 units per 100 cc. The prothrombin time was 24 seconds (normal, 16 seconds); the cephalin flocculation test was negative in twenty-four and forty-eight hours. A gastric aspiration showed free hydrochloric acid.

The patient's condition remained essentially unchanged. A gastrointestinal series revealed a grossly benign ulcer crater, 1.5 cm. in diameter, approximately 1 cm. beyond the lesser curvature of the stomach. A roentgenogram of the chest showed a heart enlarged in the region of the left ventricle. The aorta was somewhat widened, particularly in the ascending portion. On the fourth hospital day urine gave a ++++ test for albumin, and the sediment contained many red cells, with an occasional white cell and hyaline cast. A blood smear showed 8 per cent plasma cells, and a subsequent sternal-bone-marrow aspiration disclosed a marked diminution of myelopoiesis and erythropoiesis. About 80 per cent of the cells were mature plasma cells, with a few blast forms and binucleated plasma cells. Bence–Jones protein was found to be abundant in the urine. Roentgenograms of the skull, forearms, wrists and hands showed no evidence of bony disease. On intravenous pyelogram the kidneys excreted the dye promptly and outlined nondilated calyxes, pelves and ureters. A serum protein electrophoretic separation produced a normal pattern, indicating the absence of Bence-Jones protein in the serum. The spinal-fluid gold-sol curve was 0000344211. A urine culture showed colon bacilli and a few nonhemolytic streptococci. On the eleventh hospital day the patient stated that he no longer had epigastric pain but that he did feel weak "all over." Five days later the white-cell count was 47,800, with 22 per cent neutrophils, 44 per cent large lymphocytes and 34 per cent small plasma cells. On the nineteenth hospital day a gastrointestinal series showed that the gastric ulcer had decreased considerably in size. The stools became black and gave a ++++ guaiac reaction. The blood calcium was 10.6 mg., phosphorus 9.2 mg., phosphatase 3 units, nonprotein nitrogen

150 mg., total protein 7.11 gm., albumin 5.06 gm. and globulin 2.05 gm. per 100 cc. The patient grew progressively weaker despite frequent transfusions and intravenous fluids. He vomited at any attempt to eat and, although perfectly oriented, was drowsy much of the time. Hematuria and pyuria persisted. On the thirty-eighth hospital day the nonprotein nitrogen was 101 mg. per 100 cc. Two days later he took a marked turn for the worse, with bleeding at all orifices. On the following day he died.

Differential Diagnosis

Dr. Walter Bauer: If this man had difficulty keeping his food down for one year the weight loss could be accounted for on the basis of an inadequate caloric intake.

One would also like to know whether the gastrointestinal symptoms twenty-five years previously and those experienced during the four weeks prior to entry were causally related.

I assume that the diastolic murmur heard along the left border of the sternum was transmitted from the aortic area, although it is of interest that the examiner described both a blowing diastolic murmur and a Grade I whine.

I assume that the specific gravity of 1.015 is the highest recorded.

Dr. Tracy B. Mallory: One specific gravity was 1.022, and the others ranged from 1.010 to 1.015. Someone put down a question mark against the 1.022 figure, however.

Dr. Bauer: I shall assume that the specific gravity of 1.015 represented the ability of the kidneys to concentrate.

Was there any increase in cells in the spinal fluid? Was the spinal-fluid protein increased?

Dr. Mallory: The protein is recorded as 38 mg. per 100 cc. by the electrophoretic method and 42 by the old method.

Dr. Bauer: There was no mention of cells?

Dr. Mallory: Yes, I see a note saying that there were 3 cells per cubic millimeter.

Dr. Bauer: Are there any x-ray films of the knee?

Dr. Stanley M. Wyman: No. The chest films show an apparently normal upper lung. The heart shadow is increased in transverse diameter, with prominence of the apical portion, probably representing an enlarged left ventricle. The aorta is prominent in the ascending portion and shows a suggestion of bulging but no calcification in this portion of the aorta or elsewhere in its thoracic course.

Dr. Bauer: Would you care to say anything further about the aortitis?

Dr. Wyman: It certainly is suggestive of aortitis. Examination of the stomach shows a crater on the lesser curvature at the angle. An additional finding not noted in the original record is a deformed duodenal cap, which although present, is not well demonstrated in this film. There is a suggestion of a filling defect in the prepyloric region, which is better seen at the examination done seventeen days later.

Dr. Bauer: A prepyloric crater as well as one on the lesser curvature?

Dr. Wyman: It is suggestive.

Dr. Bauer: Nothing is said about that in the abstract.

Dr. Wyman: No. These spot films show the decrease in size of the crater on the lesser curvature. The next two films selected from the pyelogram examination are not satisfactory for fine detail, but they show excretion of dye in fairly good concentration without gross distortion or dilatation.

Dr. Bauer: Would you say that the patient excreted the normal amount of dye?

Dr. Wyman: I think he did well for a man of seventy-five.

Dr. Bauer: With a specific gravity of 1.015?

Dr. Wyman: Very well indeed.

The film of the skull shows no demonstrable bone disease. These films of the long bones, the lower legs and forearms reveal no definite bone destruction. The joint spaces, the wrists and the ankles appear essentially normal.

Dr. Bauer: The question is, How many diagnoses should one make? Can all the findings be explained on the basis of one disease? I do not believe so. I think there can be no doubt that this man had multiple myeloma. The evidence for that is clear-cut and certainly adequate. It is reported that the electrophoretic studies failed to reveal Bence–Jones protein in the serum. This, however, has been true of other cases of multiple myeloma. Likewise, a hyperproteinemia and a hyperglobulinemia are not always present.* I think that this man probably had a complication seen in multiple myeloma — namely, amyloidosis. There are, of course, three kinds of amyloidosis: primary amyloidosis, amyloidosis associated with multiple myeloma and secondary amyloidosis. Visceral involvement is much less frequent in the first two, and the staining reactions for amyloid are variable and atypical. It is also of interest that in most cases of primary amyloidosis in which the total serum proteins have been determined they have been found to be essentially normal.* In amyloidosis associated with multiple myeloma Bence-Jones proteinuria is present in only about half the cases. To establish the exact incidence of primary amyloidosis one must suspect and if possible rule out myeloma in all cases of amyloidosis in which no obvious cause is found.

This man had a positive blood Hinton test, spinal-fluid abnormalities, enlargement of the left ventricle, evidence of aortic-valve incompetence and enlargement of the ascending portion of the aorta. Therefore, I would like to make the additional

*Done by the Howe technic.

diagnoses of tertiary syphilis and syphilitic heart disease with aortitis. I well appreciate that in some cases of primary amyloidosis and the form associated with myeloma, endocardial and valvular amyloid deposits do occur.

There are a number of questions one would like to answer. Were the joint symptoms a year before entry due to the multiple myeloma or the associated amyloidosis? In some cases of primary amyloidosis and the type associated with multiple myeloma large deposits of amyloid are found in the articular tissues. Such patients may have joint pain and swelling, and the amyloid deposits may be demonstrable on x-ray examination. Unfortunately, no x-ray films of the joints were taken; however, it seems fair to assume that they would have been normal and that there was no clear-cut evidence of skeletal involvement in this case. The other question to be answered is: Did this man have a duodenal ulcer as well as a gastric ulcer? (I did not realize this possibility until I saw the x-ray films.) We know that involvement of the gastrointestinal tract occurs in amyloidosis and that gastric ulcerations do take place. Should one explain the gastric lesions on the basis of the associated amyloid disease, or should one make a diagnosis of a benign gastric ulcer as suggested by Dr. Wyman? I must say that I prefer to "stick my neck out," and consider the gastric lesion as being part and parcel of the amyloidosis. Primary amyloidosis and the type associated with multiple myeloma may be characterized by diffuse vascular involvement. This was demonstrated in the case I was tripped on about a year ago.[1] (I made the diagnosis of Osler's erythema group of skin diseases with visceral involvement.) Such cases may show marked deposition of amyloid in the media, sometimes with complete replacement thereof. In such cases one observes cutaneous manifestations, subcutaneous amyloid deposits and recurring purpura or purpura due to very slight trauma. In this case the bleeding occurred from all orifices. Of course, the patient may have bled from the gastric ulcer or the old duodenal ulcer, which Dr. Wyman thinks may have become activated.

As I said before, I think this patient had multiple myeloma with associated amyloid disease, amyloid deposition in the gastrointestinal tract, particularly the stomach, with associated ulcerations. As a rule the last are rather superficial. I doubt the presence of skeletal amyloidosis. The other diagnoses are syphilitic heart disease, syphilitic aortitis and a healed duodenal ulcer. I shall include also central-nervous-system syphilis because of the marginal spinal-fluid protein value and the abnormal colloidal gold curve — findings that indicate relatively quiescent or inactive central-nervous-system syphilis.

The apparently normal distribution of serum protein fractions (albumin of 5.06 gm. and globulin of 2.05 per 100 cc.) has been reported by others.[2] The results obtained by the Howe technic and the electrophoretic method are not always comparable, as shown by Gutman et al.[2] The same investigators concluded that unless special precautions are taken, the Howe method (which gives high values for albumin in normal serum) occasionally gives much too high values for serum albumin in multiple myeloma, the error being due to the abnormal protein component in the 21.5 per cent sodium sulfate filtrate of some myelomatous serums.

DR. ALFRED KRANES: Do you want to say anything about the kidneys?

DR. BAUER: I meant to and forgot. I think the urinary abnormalities were due to amyloidosis. Marked albuminuria, hematuria (usually of a lesser degree than in this case) and pyuria have been noted in some cases of amyloidosis associated with multiple myeloma. Of course, there is always the possibility that the Bence–Jones protein precipitates out in the renal tubules. About a third of the cases of amyloidosis associated with multiple myeloma have renal involvement. Histologic examination of the kidneys shows amyloid in the glomeruli and in the media of vessels. I predict that the kidneys will show amyloid.

DR. DANIEL S. ELLIS: Do you have to presuppose that amyloid deposits and not the myeloma itself caused this picture?

DR. BAUER: No, but I think I am dealing with a disease akin to primary amyloidosis. I appreciate that in the case of a patient of seventy-five it is hazardous to explain so many findings on the basis of one disease. However, I prefer to do so, even though the chance of being wrong is great.

DR. BERNARD M. JACOBSON: I would like to take issue with Dr. Bauer on a few items. I would not pass off the normal globulin so easily. I think it is a clinical finding against myeloma. On a statistical basis this is only the third case in this hospital with normal globulin by the Howe method.

DR. BAUER: Have you read the article by Gutman et al.?

DR. JACOBSON: No; I will. But I will not retract the statement. In the second place, these plasma cells as I saw them in the blood smear and bone marrow were extremely mature, quite different from the ordinary case of myeloma. One might wonder because some writers say that this maturity indicates a better prognosis than the immature cells. Obviously, that did not apply here. Hematuria and pyuria cannot be called common findings in amyloid disease.

DR. BAUER: Nevertheless it is recorded in 2 cases I reviewed.

DR. JACOBSON: In this article?

DR. BAUER: No; 2 cases reported by Eisen.[3]

DR. JACOBSON: That may be true, but it is not common in this hospital.

DR. BAUER: Serum protein fractions in multiple myeloma are reported in some detail by Gutman

et al.[3] They observed 4 cases with normal total serum protein levels with hyperglobulinemia, 11 cases with apparently normal distribution of serum protein fractions and 1 with marked hypoproteinemia (4.0 and 3.5 gm. total serum protein levels). It is also of interest that the Congo-red test is more often negative than positive in cases of primary amyloidosis and amyloidosis associated with multiple myeloma.

DR. WALTER F. LEVER: I did the electrophoretic analysis. The albumin was 51 per cent, which is a value well within normal limits. With the electrophoretic analysis normal albumin is 55 per cent.

DR. KRANES: I think it is of interest that this man had a normal renal function until he had a sudden change.

DR. BAUER: I overlooked this point. I thought the nonprotein nitrogen was 150 mg. per 100 cc. before the hemorrhage.

DR. KRANES: Before or after?

DR. LEVER: The nonprotein nitrogen rose first.

DR. KRANES: I get the impression that the nonprotein nitrogen rose following the hemorrhage.

DR. BAUER: Yes; on rereading the case history I find that is right. I still think this patient had amyloidosis of the kidneys. However, Dr. Kranes is right about the sequence of events before and after the hemorrhage. The hemorrhage was "the straw that broke the camel's back" and caused the renal ischemia that resulted in the rapid rise in the nonprotein nitrogen.

CLINICAL DIAGNOSES

Plasma-cell myeloma.
Uremia.
Duodenal ulcer.

DR. BAUER'S DIAGNOSES

Multiple myeloma.
Amyloidosis, associated with multiple myeloma.
Tertiary syphilis.
Syphilitic aortitis.
Inactive central-nervous-system syphilis.
Duodenal ulcer, healed.

ANATOMICAL DIAGNOSES

Multiple myeloma, plasmocytic.
Myeloma kidney.
Retroperitoneal hematoma.
Syphilitic aortitis.
Benign ulcer of stomach.

PATHOLOGICAL DISCUSSION

DR. MALLORY: Autopsy showed very characteristic multiple myeloma involving the marrow of all bones examined — the vertebra, ribs and sternum. The plasma cells, as Dr. Jacobson noted, were quite mature in type, although in the marrow tumors multinucleated cells are quite common. It is rather unusual in cases of plasma-cell myeloma to see many plasma cells in any of the viscera outside the bone. None were found in this case. Going back to the other features of the autopsy, there was an active peptic ulcer of the stomach, and there were two diverticula of the duodenum but no ulcers. We did not find any evidence of amyloid disease. The heart was normal except for a slight thickening of the aortic cusps. The ascending aorta was diffusely dilated, and it was very difficult to decide whether this was arteriosclerotic or syphilitic. I think it probably was burnt out and very inactive syphilitic aortitis. The kidneys were a little large, weighing 410 gm., and showed the characteristic picture seen in Bence–Jones proteinuria. The tubules were filled with casts and precipitated protein. In a few cases foreign-body giant cells were noted around the casts, which is rather specific for the so-called myeloma kidney.

We did not have permission to examine the central nervous system so that I cannot say whether or not there was evidence of syphilis there.

DR. BAUER: No evidence of amyloid?

DR. MALLORY: No.

DR. BAUER: And it was looked for?

DR. MALLORY: Yes — in significant amounts it could not be missed by any method.

DR. BAUER: Some people disagree: it may not be demonstrable in primary amyloid disease and in the type associated with multiple myeloma. The Congo red may not be absorbed.

DR. MALLORY: Yes, but one sees hyaline-like tissues whether or not it stains correctly with the method. One can miss an isolated deposit of amyloid, for instance, one limited to the joints, in cases in which the extremities are not dissected, but generalized amyloidosis could not be missed if routine microscopical examination was done.

DR. BAUER: So you would not miss it in the kidney?

DR. MALLORY: No.

One other finding concerns the point that Dr. Kranes made: there was evidence of extensive hemorrhage within the body, — the retroperitoneal tissues, particularly around the pelvis, and the lymphoid tissues, were filled with old hemorrhage, much of which had coagulated, and was dark brown. It must have been present many days before death. So there was internal as well as external hemorrhage, which may have had something to do with the development of the renal insufficiency. The purpuric tendency could have been due to renal insufficiency or to bone-marrow replacement in this case.

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TEAMWORK

ANY undertaking prospers according to the quality of effort that goes into its various activities. The physician who practices his profession must be well grounded in its fundamental principles and skilled in their application. He must constantly add to his knowledge and, with the equipment thus assured, he must employ also his personality in gaining the confidence and the respect of his patients. He must be faithful, diligent, cheerful and self-sacrificing, and he must have also the co-operation of those with whom he labors.

The success of an industry depends primarily on the quality of its product. To ensure this quality, however, there must be comparable quality in the raw materials used and there must be skill and integrity in the workmanship. In order that the enterprise shall succeed there must be attractive but honest advertising, backed up by good salesmanship. The confidence of the consumer must be obtained and secured.

So it is with journalism, and even with medical journalism, for this professional activity must operate under the same economic laws that apply to the practice of a profession or the operation of a trade. If continuing success is to be enjoyed, the quality of the product must be maintained at a high level as the basic factor. This quality must also constantly be brought to the attention of new readers and possible subscribers, for with publications as with other living matter, a strong circulation is an essential of health.

Not only does the circulation itself bring to the journalistic tissues those corpuscular bodies known to the creditor class as hard cash; it implies also that element of readability with which all but the most pessimistic of advertisers are visibly impressed.

The lesson is obvious. Those who have products to sell will display their wares where they will be favorably noticed by the greatest number of prospective buyers.

Two complementary factors are necessary if the experiment in teamwork is to achieve its best results. The sellers must present their products, which must conform to the highest ethical standards, as attractively and as arrestingly as possible and the readers on their part must bear in mind that the advertising pages of a journal may prove just as valuable to them as its text, and that by reading the advertisements and mentioning the journal when they buy or make inquiries they are strengthening the confidence of the advertiser in the medium that he has selected.

The *New England Journal of Medicine* having just passed its one hundred and twenty-first birthday — its one hundred and thirty-seventh according to a more favorable way of reckoning — is doing very well in both particulars and is enjoying, in these critical years, its peak circulation as well as its highest advertising revenue to date. These increases, however, are barely sufficient to neutralize rising costs of publication and the *Journal* is not at all unmindful of the fact that its contin-

ued prosperity is dependent on its readers and its advertisers, and may the twain frequently meet! Suggestions for bringing about, continuing and strengthening this happy union and for improvements in advertising readability will be welcomed. It goes without saying that efforts are constantly made to ensure advertising material only of the highest grade.

STREPTOMYCIN AS A PROPHYLACTIC AGENT

Soon after the discovery of streptomycin it was shown that this antibiotic is highly active against the gram-negative bacilli and against many of the other organisms that constitute the flora of the large bowel. It was also demonstrated that streptomycin given by mouth is poorly absorbed so that about 95 per cent of an orally administered dose could be recovered in the feces and only about 2 per cent in the urine.

Direct studies in experimental animals have shown that streptomycin is highly effective in reducing the total number of bacteria in the feces and that this reduction can be accomplished more rapidly and more thoroughly with streptomycin than with other available agents, particularly the sulfonamides. Some of the early studies in animals[1] and in man[2] gave no indication of the development of resistance by the fecal organisms. Subsequent investigations,[3, 4] however, have indicated that there is a rapid replacement of the fecal organisms by streptomycin-resistant organisms. This tendency was less marked when the so-called enteric sulfonamide drugs, such as sulfasuxidine and sulfathaladine, were used in conjunction with streptomycin, but even the combination of such agents failed to prevent the appearance of the resistant strains.

The studies of Poth and his associates[3] have demonstrated the value of sulfasuxidine in the preoperative and postoperative care in surgical procedures on the bowel. In their animal experiments they also showed that open technics of anastomosis could more safely be utilized if adequate doses of sulfasuxidine were used. Streptomycin administered orally failed to maintain an alteration of the bacterial flora for a sufficient time to permit the experimental evaluation of its effects on the healing of the bowel wound. When both sulfasuxidine and streptomycin were used, the results were essentially the same as when sulfasuxidine alone was used. The use of streptomycin alone had to be abandoned after the first few experiments because the immediate reduction in the bacterial count was not maintained.

Rowe and his co-workers[4] have studied the fecal flora of patients before and after operations on the large bowel and attempted to determine the value of sulfathaladine and streptomycin as adjuncts to this type of surgery. They found that the fecal coliform organisms could be reduced 99.99 per cent in an average of three and a half days when the patient was given sulfathaladine in doses of 0.1 gm. per kilogram of body weight per day in divided doses. With the oral administration of streptomycin in doses of 2 gm. per day a similar reduction was accomplished in twenty-four hours. Reversion of bacterial counts due to resistant organisms was not observed with the sulfonamide but did occur with streptomycin, particularly when a dose of only 0.5 gm. per day was used. The combination of the two drugs even in the larger doses did not entirely prevent this reversion. In the course of their studies Rowe and his associates observed a case in which a coliform organism became resistant to both drugs during the preoperative prophylactic treatment and was later responsible for a postoperative peritonitis. The infection proved fatal, since it obviously could not be affected by these chemotherapeutic agents.

On the basis of their preliminary observations these authors suggest that streptomycin should not be employed alone but that a preliminary test of sulfathaladine for five to seven days and streptomycin for about forty-eight hours or less is worthy of a trial. Actually, the data suggest that the combination used for no more than twenty-four hours is the best regime in preparation of the bowel for surgery. They emphasize the fact that prolonged administration of streptomycin is not desirable and that it is unlikely that the combination of the sulfonamides with streptomycin can alter the total bacterial counts for any prolonged periods.

More recently Lockwood and his co-workers,[5] after noting the conflicting reports in the literature,

recorded their own appraisal of orally administered streptomycin as an intestinal antiseptic. They did careful serial quantitative bacterial counts in the feces of patients receiving streptomycin by mouth. Only half the patients showed a drop in the number of coliform organisms, and this drop was prolonged and significant in only a fourth of the cases. There was no significant reduction in the number of streptococci in 87.7 per cent of the cases, and 38.9 per cent failed to show any reduction in the clostridial counts in the feces. The bacilli demonstrated rapid development of resistance to streptomycin so that many became able to proliferate in the concentration of streptomycin present in the feces. The results in a small group of cases treated with streptomycin and sulfathaladine were also inconsistent. These workers concluded that streptomycin administered by mouth is unpredictable and unreliable, and its use in preoperative preparation of surgical cases is not recommended.

It is also noteworthy that streptomycin-resistant organisms may appear in the feces of patients who receive streptomycin only by intramuscular injection.[6] This finding is not surprising since it has been shown that streptomycin-resistant organisms also appear in the throat cultures of 98 per cent of patients who have been under treatment with intramuscular injections of streptomycin for several days.[7]

In general, some of the properties of streptomycin — namely, its tendency to produce serious vestibular damage on prolonged use and particularly the rapid replacement of the bacterial flora by highly resistant strains — suggest that it is a very poor prophylactic agent in the usual sense. It may, however, be useful under certain circumstances provided it is given under optimal conditions. The data cited suggest that in cases of the usual gram-negative bacillary infections, such as might arise during large-bowel surgery or during manipulations of an infected urinary tract, streptomycin administered for not more than twenty-four hours prior to the operation may reduce the volume of infection at the operative site and thus diminish the chances of postoperative infection and thereby improve the healing process. If the bowel is to be opened a sulfonamide may be used for the same or a longer period preoperatively.

In cases of tuberculosis in which the organisms multiply more slowly and resistant strains may not appear in large numbers until after two or three weeks of streptomycin treatment, preliminary administration may be carried out for about a week before extensive operations on tuberculous lesions and still permit two weeks or more of treatment postoperatively with the expectation that the streptomycin effect will be sustained during this period. The longer the period of preoperative streptomycin treatment, the greater the risk of an increased number of resistant tubercle bacilli and the less the opportunity for the streptomycin effectively to cope with any postoperative spread of the tuberculous infection.

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THE AMERICAN CANCER SOCIETY

During the last few years the American Cancer Society has raised and spent many millions of dollars on research, service and education. Positive accomplishments of its work may be found in all parts of the country. At the same time doctors, hospitals, federal, state and local government units, and individuals have accomplished much in this field. The local units of the Cancer Society in every city and town are now asking the people for more money. In view of the large efforts of the doctors, the Government and other organizations and individuals is this money needed?

The answer must be that it is. This organization is the best possible catalyst to stimulate and pull together the efforts of everybody. It is set up so that it is a true partnership of doctors and the people in this common effort.

Its research program has already affected the treatment of many kinds of cancer. Its devoted

workers have alleviated thousands of desperate social situations by making modern treatment available. Its educational program has brought the word cancer out into the public eye and brought more and more early curable patients to the doctors' offices.

From the standpoint of the physician all this adds up to the fact that it is an organization whose every effort helps correct the kind of situation that leads unthinking people to clamor for Government medicine. If for no other reason than his interest in humanity as a whole, the thoughtful doctor will support this society by working for it or with it and by contributing to its drive. He will show the people that he appreciates what they are doing by giving generously himself and by asking his patients to give.

If any prospective contributor does not know his local treasurer or the address of his state headquarters, he may merely put his check in an envelope marked "Cancer, c/o Local Postmaster." This letter will go to his state headquarters.

DOCTOR NEEDED

ONE of the outstanding needs in the distribution of medical care is that of the rural district. This need is recognized in the pediatric survey recently conducted by the American Academy of Pediatrics, and in the creation of a committee on rural medical service by the American Medical Association in 1945. It is recognized in the controversial ten-year program of the federal security administrator.

Efforts are being directed toward the solution of this problem, not only by the agencies mentioned but by others, such as the Board of Missions of the Methodist Church that is currently trying to provide medical care for many rural areas. Outstanding among these medically needy communities, according to the Methodist Board of Missions and Church Extension, of 150 Fifth Avenue, New York, is Newton County, in northwest rural Arkansas. Here 10,000 persons are without a physician or a nurse and the nearest hospital is twenty-five miles from the county seat.

NOTES FROM THE MEDICAL EXAMINER

ASPHYXIATION FOLLOWING THERMAL BURNS OF THE FACE

Persons trapped in conflagrations may die as a result of damage to the respiratory tract without injury to the surface of the body.[1] The problem of whether smoke and irritant gases or tremendously heated air is the responsible agent has often been discussed.[2] In 1945 Moritz, Henriques and McLean[3] reported an experimental study of the effects of inhaled heat, which showed that only when the original temperature of heated air is high enough to produce instantaneous burning of the skin and upper respiratory mucosa is there thermal damage to the pulmonary parenchyma. The amount of heat contained in the small volume of tidal air is the limiting factor for thermal injury of the air passages, whereas skin lying on the surface of the body is exposed to relatively enormous volumes of heated air passing across it by convection currents. For this reason it is safe to conclude that no damage to the respiratory tract *due to heat alone* can occur without burns of the face. Conversely, in the presence of burns of the face, there may be injury of the air passages.

Two of the 3 patients in the following case reports would probably have survived their burns had the attending physicians appreciated the hazard of respiratory obstruction coincident with burns of the face.

CASE 1. A 40-year-old man was removed from a conflagration in an abandoned dwelling at 5:30 a.m. In the building there were "500 cases of Sterno," the residue of numerous alcoholic sprees. Pressure dressings were applied to second-degree and third-degree burns of the face and hands, and to spotty areas of the shoulders and arms. The blood pressure was 120/70, and the pulse 100. Intravenous injections of glucose in saline solution were given. He drank milk frequently and talked easily, stating that he felt well. At 2:00 p.m. he was observed to be suddenly breathing with difficulty. Aspiration, artificial respiration and intracardiac adrenalin were ineffective, and death occurred at 2:15 p.m., 8¾ hours after removal from the fire.

Post-mortem examination revealed the body of a well developed and well nourished man, 63½ inches in length, weighing 145 lb. The hair of the head was uniformly singed. There was second-degree and third-degree burning of the face, left shoulder and hand, right axilla, upper arm, forearm and hand. The total burned area was less than 10 per cent. Significant autopsy findings were fluidity of blood; edema and hyperemia of the lungs, the left weighing 380 and the right 460 gm.; extensive deposition of carbon particles throughout the trachea and bronchial tree; and laryngeal edema most marked at the glottis, reducing the lumen to a diameter of about 0.3 inch.

In this case the burns were of slight extent, though severe. The carbonaceous material in the trachea and bronchi is proof that the products of combustion were inspired.

CASE 2. A 48-year-old man was found inside a door at the foot of stairs leading down from his apartment in which an oil heater had exploded, killing two of his children. At 12:45 a.m., pressure dressings were applied to the face, arms and shoulders. Fluids were forced. Medication con-

sisted of demerol and penicillin at 3-hour intervals. He was said to show marked hemoconcentration and died at 7:39 p.m. — 19 hours after injury.

Post-mortem examination disclosed the body of a well developed and well nourished man, 71 inches in length, weighing 165 lb. The hair was extensively burned away. There was burning of the scalp, entire face, anterior portion of the neck, shoulders and both hands. The total area was 10 per cent of body surface. Severe edema of the face, scalp and neck was present. A pressure dressing had been applied to the head and shoulders with firm gauze binding crossing diagonally from head to axilla over the throat. The trachea and bronchi showed no gross injury. The right lung weighed 460 and the left 300 gm. Both lungs were crepitant throughout. Surrounding the lower pharynx and larynx there was massive edema. The glottis was almost occluded by submucosal edema.

This case demonstrates the additional obstructing force of edema extrinsic to the pharynx and larynx.

Case 3. A 43-year-old Negro was removed from a conflagration resulting from a defective oil heater. He was admitted to the hospital at 7:30 a.m. extensively burned but alert and oriented. Pressure dressings were applied. Shortly before death at 4:15 p.m., alert attendants observed respiratory distress, and an emergency tracheotomy was performed but without benefit.

Post-mortem examination showed the body of a Negro 68 inches in length, with second-degree and third-degree burns of the right forehead and cheek, eyelids, lips, chin and anterior portion of the neck, with additional burns totaling about 70 per cent of the body surface. There was a tracheotomy tube passing down through a region of massive edema of the pretracheal tissues into the trachea. Surrounding the inner orifice of the tube was a pool of clotted and liquid blood obstructing both tube and trachea. Massive edema was present throughout the neck, and there was a moderate degree of glottic edema.

The interval of twenty-eight hours prior to autopsy reasonably explains the dissipation of edema fluid from the submucosal glottic tissues. The extraordinary degree of peritracheal and subcutaneous edema interfered with insertion of the tracheotomy tube and accounts for the hemorrhage from the incision funneling into the trachea.

In these cases, glottic edema precipitated asphyxiation. Whether an appreciable part of the edema was due to heat is debatable, but the burns of the face indicate close contact with the concentrated irritant gaseous products of combustion.[4] Intubation and prophylactic tracheotomy are possible preventive measures, probably even superior to competent nursing care for thirty-six hours after injury.

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Richard Ford, M.D.

Research Fellow in Pathology and Legal Medicine, Harvard Medical School, and *Associate Medical Examiner*, Suffolk County.

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

COMMUNICABLE DISEASES IN MASSACHUSETTS FOR FEBRUARY, 1949

Résumé

Disease	February 1949	February 1948	Seven-Year Median
Chancroid	8	4	2*
Chicken pox	3776	1838	1651
Diphtheria	33	19	19
Dog bite	680	600	511
Dysentery, bacillary	0	11	9
German measles	206	79	188
Gonorrhea	203	186	345
Granuloma inguinale	0	0	0*
Lymphogranuloma venereum	0	2	2*
Malaria	0	3	8
Measles	5285	2093	1877
Meningitis, meningococcal	4	9	19
Meningitis, Pfeiffer-bacillus	3	2	2
Meningitis, pneumococcal	2	2	4
Meningitis, staphylococcal	0	0	0
Meningitis, streptococcal	0	0	0
Meningitis, undetermined	3	5	5
Mumps	1302	1559	1113
Poliomyelitis	0	2	1
Salmonellosis	2	4	4
Scarlet fever	1312	429	1201
Syphilis	168	198	363
Tuberculosis, pulmonary	188	200	200
Tuberculosis, other forms	10	10	14
Typhoid fever	4	1	2
Undulant fever	2	5	1
Whooping cough	249	294	595

*Five-year median.

Comment

Diseases above the seven-year median were chancroid, chicken pox, diphtheria, dog bite, German measles, measles, mumps, scarlet fever and typhoid fever.

Diseases below the seven-year median were bacillary dysentery, poliomyelitis, salmonellosis and whooping cough.

Scarlet fever rises and falls in fairly predictable cycles over the years of reporting. The low year of such a cycle was 1947. In 1948 there was a reversal of the trend, and the disease can be expected to rise to another peak during the next year or two. The incidence of measles was the highest for February since 1935. That for chicken pox was the highest since reporting began in Massachusetts. The incidence of diphtheria remained high.

Geographical Distribution of Certain Diseases

Anthrax was reported from: Peabody, 1; total, 1.

Diphtheria was reported from: Billerica, 2; Boston, 19; Chelsea, 1; East Brookfield, 3; Everett, 2; Malden, 1; Northampton, 1; Revere, 1; Taunton, 2; Wellesley, 1; total, 33.

Encephalitis, infectious, was reported from: Lowell, 1; total, 1.

Infectious hepatitis was reported from: Haverhill, 1; Williamstown, 1; Wrentham, 19; total, 21.

Meningitis, meningococcal, was reported from: Fairhaven, 1; Greenfield, 1; Natick, 1; Westport, 1; total, 4.

Meningitis, Pfeiffer-bacillus, was reported from: Haverhill, 1; Sharon, 1; West Boylston, 1; total, 3.

Meningitis, pneumococcal, was reported from: Fitchburg, 1; Warren, 1; total, 2.

Meningitis, undetermined, was reported from: Taunton, 1; Tyngsboro, 1; Worcester, 1; total, 3.

Salmonellosis was reported from: Erving, 2; total, 2.

Septic sore throat was reported from: Acton, 1; Arlington, 1; Boston, 6; Groton, 1; Medford, 1; Natick, 1; Orleans, 2; Randolph, 1; Westport, 1; total, 15.

Tetanus was reported from: Brookline, 1; total, 1.

Trachoma was reported from: Foxboro, 3; total, 3.

Trichinosis was reported from: Williamstown, 1; total, 1.

Typhoid fever was reported from: Tewksbury, 4; total, 4.

Undulant fever was reported from: Lenox, 1; Saugus, 1; total, 2.

CORRESPONDENCE

REPUDIATION OF AMERICAN MEDICAL ASSOCIATION ASSESSMENT

To the Editor: I delayed paying the $25.00 assessment of the American Medical Association until there was time for a statement of policy authorized by the Association. Now that this has appeared, I have decided not to pay the assessment of $25.00 to support the policy of the American Medical Association because that statement as set forth in the February 19 issue of the *Journal of the American Medical Association* is too vague to be satisfactory, particularly as to legislation to provide the money to carry out its various items, and because the official answer of the American Medical Association to a group of protestants, who, to those familiar with American medicine, represent the cream of the profession, is unsatisfactory, since it does little more than call names and does not acknowledge the seriousness of the situation that called out this protest and does not indicate any intention of attempting to correct it.

This determination of mine not to pay the assessment is a protest against the present policy of the American Medical Association, not a support of governmental compulsory insurance to provide medical care along the lines proposed by President Truman; that I believe to be highly undesirable.

HENRY A. CHRISTIAN, M.D.

Brookline, Massachusetts

NOTE: Over 2300 fellows of the Massachusetts Medical Society have already made their contribution to the American Medical Association. — ED.

FURTHER COMMENT ON EXTRARENAL AZOTEMIA

To the Editor: In the January 20 issue of the *Journal*, Appel and Townsend reported on an interesting case of "Extrarenal Azotemia" with recovery. No mention was made of the possibility of carbon tetrachloride poisoning. The possibility of carbon tetrachloride poisoning as a cause of uremia is frequently overlooked. The liver damage in this poisoning may be transient, and jaundice may be absent. It may be difficult to elicit a history of exposure to carbon tetrachloride because of the uncertain interval between exposure and renal shutdown. The differential diagnosis of any unexplained uremia should include the possibility of carbon tetrachloride nephrosis.

JACOB J. SILVERMAN, M.D.

Staten Island, New York

A CLINICAL SUGGESTION

To the Editor: Skin-temperature determinations are frequently of considerable clinical value. The available methods vary from the application of the observer's hand to the use of electrothermometers such as the "dermatherm" and "dermalor."

With increasing interest in the study and treatment of diseases of the peripheral vascular and sympathetic nervous systems, I should like to suggest an instrument that is simple, inexpensive and adequately accurate for ordinary testing. It is an English skin thermometer. Its chief differences from the ordinary clinical thermometer are that the glass of the mercury-containing bulb is much thinner and that there is no trap, and therefore no shaking is necessary between readings.

It has been found precise to within 1°F. when checked against the electric apparatus in the Hypertension Laboratory of the Massachusetts General Hospital (by Dr. Davitt Felder). Attention was called to this thermometer by Dr. Moses Suzman, of Johannesburg, in 1947. I have found none like it manufactured in this country. Anyone who is interested may procure these instruments in 4-inch or 8-inch sizes from L. H. Marks, Ltd., 1 Belfast Road, London, N. 16.

JOHN B. SEARS, M.D.

416 Marlborough Street
Boston

FAMILY DOCTORS NEEDED

To the Editor: Dr. Henry F. Howe's letter in the March 10 issue of the *Journal* should be sent to the dean and professors of medicine of every medical school in the United States. If the A. M. A. would expend some of its so-called educational-fund assessment on the dissemination of this sort of plain common sense there would be far less chance of the public's demanding or even accepting socialized medicine.

At present the medical schools and large hospitals are engaged in turning out specialists with no regard for the necessity of general practitioners. Here in my own community, within twenty miles of Boston and access to all its facilities, with an increase of over 500 families in the last five years and the loss by death of two physicians, there has been no addition of qualified family physicians.

During this period I have had numerous young surgeons and other specialists inquire about the chance of establishing a lucrative practice. Not a single man has evinced the slightest interest in helping to carry the daily load of calls, which neither demand nor can afford a specialist. There is not even the excuse of lack of housing, since a most desirable house with adequate office arrangement is available.

The few general practitioners in Natick are exhausting themselves trying to provide medical coverage for the population. With long waits for both office and house calls it is no wonder that the public is becoming dissatisfied with the medical profession's handling of the situation. A serious epidemic would be a disaster.

I believe that many young medical students would gladly devote themselves to general practice, with its comparatively earlier financial returns, if the role of family physician were not looked down upon in the medical schools.

A medical profession that does not provide what the public needs or wants will have only itself to blame if the public turns to Government medicine to fill this lack.

JAMES E. VANCE, M.D.

Natick, Massachusetts

NOTICES

BOSTON CITY HOSPITAL HOUSE OFFICERS ASSOCIATION

The following programs of the Boston City Hospital House Officers Association will be presented in the Evening Lecture Series:

April 11. The Surgical Problem of Carcinoma of the Female Genitalia Persistent or Recurrent after Conservative Treatment. Alexander Brunschwig, M.D., attending surgeon, Memorial Hospital for Treatment of Cancer and Allied Diseases, and professor of clinical surgery, Cornell University Medical College.

April 12. Role of Iron Metabolism in Hypochromic Anemia. Carl V. Moore, M.D., associate professor of Medicine, Washington University School of Medicine, St. Louis.

April 14. Lower-Nephron Nephrosis. Baldwin Lucké, M.D., professor of pathology, University of Pennsylvania School of Medicine.

These programs are held at 7:00 p.m. in the New Cheever Amphitheater of the Dowling Building, Boston City Hospital. All interested persons are invited to attend.

HARVARD MEDICAL SOCIETY

A meeting of the Harvard Medical Society will be held in the Lower Out-Patient Department Amphitheater, Massachusetts General Hospital, on Tuesday, April 12, at 8 p.m.

PROGRAM

Anatomy and Physiology of Splanchnic Pathways from the Viscera. Dr. James C. White.

Anatomy and Physiology of Pain Pathways in the Brain Stem and Spinal Cord. Dr. William H. Sweet.

A subsequent meeting will be held on May 10.

MASSACHUSETTS PHYSICIANS CLUB

A meeting of the Massachusetts Physicians Club will be held at the Hotel Kenmore, Boston, on Tuesday, April 12, at 8:30 p.m. Dr. John F. Conlin, director of medical information and education, Massachusetts Medical Society, will speak on the topic "Socialized Medicine."

All interested physicians and medical students are invited to attend.

MASSACHUSETTS CHAPTER, AMERICAN ACADEMY OF GENERAL PRACTICE

The first annual clinical meeting of the Massachusetts Chapter of the American Academy of General Practice will be held in Boston on Friday, April 15. The morning session will be held at the Peter Bent Brigham Hospital, and the afternoon and evening sessions at the Hotel Statler.

PROGRAM

9:00–10:00 a.m. Ward Rounds. Francis D. Moore, M.D., surgeon-in-chief, Peter Bent Brigham Hospital, and Moseley Professor of Surgery, Harvard Medical School.

10:00 a.m.–12:00 m. Clinic — Amphitheater — George W. Thorn, M.D., chief, Medical Division, Peter Bent Brigham Hospital; Hersey Professor of Medicine, Harvard Medical School; associate professor of medicine, Johns Hopkins University School of Medicine. (Cases will be presented and discussed by all services.)

12:00–12:30 p.m. Registration (Parlor A).

12:30–1:30 p.m. Luncheon (Hancock Room — tickets, $3.00).

1:30–2:15 p.m. Emotional Factors in Psychosomatic Illness. Bearing on Early Childhood Relationships. Alfred Ludwig, M.D., assistant psychiatrist, Massachusetts General Hospital.
Five minutes' intermission.

2:30–3:05 p.m. Premarital Counseling. James C. Janney, M.D., assistant professor of gynecology, Boston University School of Medicine.
Five minutes' intermission.

3:10–3:55 p.m. Rh Factor. William C. Moloney, M.D., assistant professor of medicine, Tufts College Medical School.
Five minutes' intermission.

4:00–4:45 p.m. Treatment of Hypertension. William Dock, M.D., professor of medicine, Long Island College of Medicine, and director of medicine, College Division, Kings County Hospital, New York.
Five minutes' intermission.

4:50–5:35 p.m. Virus Diseases from the Clinical Point of View. Conrad Wesselhoeft, M.D., clinical professor of infectious diseases, Harvard Medical School.

6:00–7:00 p.m. Business meeting.

7:30–8:30 p.m. Banquet (tickets, $4.50).

8:30 p.m. Our Social Structure as a Cause of Psychosomatic Disorders. Paul Graves Myerson, M.D., assistant professor of psychiatry, Tufts College Medical School, instructor in psychiatry, Harvard Medical School, and physician-in-charge of nervous and mental diseases, Boston Dispensary.

All addresses are designed for everyday practical application to the needs of the general practitioner.

Doctors' wives are cordially invited to the afternoon and evening sessions and to the banquet.

Dress will be informal.

NEW ENGLAND SOCIETY OF PHYSICAL MEDICINE

A meeting of the New England Society of Physical Medicine will be held in the Bigelow Amphitheater, Massachusetts General Hospital, on Wednesday, April 20, at 8 p.m.

The program, under the direction of Dr. Arthur L. Watkins, will be a Symposium on Rheumatoid Arthritis.

ROSWELL PARK LECTURE AND MEDAL

Dr. Evarts A. Graham will deliver the Roswell Park Lecture of the Buffalo Surgical Society at the Kleinhans Music Hall, Buffalo, New York, on Thursday, May 5, at 9 p.m. The Roswell Park Medal for outstanding surgical achievement will be awarded to Dr. Graham on this occasion.

MASSACHUSETTS PHYSICIANS ART ASSOCIATION

The Massachusetts Physicians Art Association will hold its annual exhibit in conjunction with the annual meeting of the Massachusetts Medical Society at Worcester, May 24–26. Any member wishing to exhibit must send a list with the title, the medium, the evaluation and the approximate size of his pieces to Dr. Charles E. Ayers, 36 Pleasant Street, Worcester, Massachusetts, by April 25. Paintings must be framed for hanging. Transportation and insurance will be arranged for without charge by the Massachusetts Physicians Art Association.

ACADEMY OF NEUROLOGY

Establishment of the new American Academy of Neurology, latest of the specialty group organizations to come into existence, has been announced by its president, Dr. A. B. Baker of Minneapolis.

The purpose of the Academy is "to further and encourage the practice of clinical neurology and to stimulate teaching and research in neurology and allied sciences." The Academy has three grades of membership: active membership open to all physicians who have been certified in neurology or neurology and psychiatry; junior membership open to those at present engaged in postgraduate study in neurology or awaiting certification; and associate membership for noncertified physicians whose interests are in allied fields.

The first scientific meeting of the Academy will be held at French Lick Springs, June 1, 2 and 3, 1949.

SOCIETY MEETINGS AND CONFERENCES

JANUARY 7–APRIL 13. American College of Surgeons. Sectional Meetings. Page xi, issue of December 23.

APRIL 1–28. Consultation Clinics for Crippled Children in Massachusetts. Page 489, issue of March 24.

APRIL 11, 12 AND 14. Boston City Hospital House Officers Association. Page 587.

APRIL 12. New England Society of Anesthesiologists. Page 490, issue of March 24.

APRIL 12. Harvard Medical Society. Page 587.

APRIL 12. Massachusetts Physicians Club. Notice above.

APRIL 14. Practical Aspects of the Treatment of Hypertension. Dr. John C. Leonard. Pentucket Association of Physicians. 8:30 p.m. Haverhill.

APRIL 14–17. American College of Allergists. Page 276, issue of February 17.

APRIL 15. Massachusetts Chapter, American Academy of General Practice. Notice above.

APRIL 20. New England Dermatological Society. Page 528, issue of March 31.

APRIL 20. New England Society of Physical Medicine. Notice above.

APRIL 30. Long Island College Alumni Association. Page 528, issue of March 31.

MAY 4. New England Obstetrical and Gynecological Society. Springfield Country Club, Springfield.

MAY 5. Suffolk Censors' Meeting. Page 276, issue of February 17.

MAY 5. Roswell Park Lecture and Medal. Notice above.

MAY 7. New England Society of Anesthesiologists. Page 401, issue of March 10.

MAY 10. Harvard Medical Society. Lower Out-Patient Department Amphitheater, Massachusetts General Hospital.

MAY 16–19. American Urological Association. Biltmore Hotel, Los Angeles, California.

MAY 18–21. Association for Physical and Mental Rehabilitation. Page 401, issue of March 10.

MAY 24–26. Massachusetts Medical Society. Annual Meeting. Worcester Memorial Auditorium, Worcester.

MAY 24–26. Massachusetts Physicians Art Association. Notice above.

MAY 26–28. American Goiter Association. Hotel Loraine, Madison, Wisconsin.

MAY 30–JUNE 3. International Congress on Rheumatic Diseases. Page 800, issue of November 18.

JUNE 1–3. Academy of Neurology. Notice above.

(*Notices concluded on page xix*)